S. HRG. 103-768, Pt. 2

# ENDANGERED SPECIES ACT AMENDMENTS OF 1993

Y 4. P 76/10.5. HEG. 103-768/PT. 2

Endangered Specie, Act Amendments o.

## **TLANINGS**

BEFORE THE

SUBCOMMITTEE ON CLEAN WATER, FISHERIES, AND WILDLIFE OF THE

# COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

ON

#### S. 921

A BILL TO REAUTHORIZE AND AMEND THE ENDANGERED SPECIES ACT FOR THE CONSERVATION OF THREATENED AND ENDANGERED SPECIES, AND FOR OTHER PURPOSES

JUNE 15; JULY 19; AND SEPTEMBER 29, 1994

Part 2

Printed for the use of the Committee on Environment and Public Works



JAN 17



## ENDANGERED SPECIES ACT AMENDMENTS OF 1993

## **HEARINGS**

BEFORE THE

SUBCOMMITTEE ON CLEAN WATER, FISHERIES, AND WILDLIFE OF THE

# COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

ON

#### S. 921

A BILL TO REAUTHORIZE AND AMEND THE ENDANGERED SPECIES ACT FOR THE CONSERVATION OF THREATENED AND ENDANGERED SPECIES, AND FOR OTHER PURPOSES

JUNE 15; JULY 19; AND SEPTEMBER 29, 1994

Part 2

Printed for the use of the Committee on Environment and Public Works



U.S. GOVERNMENT PRINTING OFFICE

83-722 cc

WASHINGTON: 1994

#### COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

MAX BAUCUS, Montana, Chairman

DANIEL PATRICK MOYNIHAN, New York GEORGE J. MITCHELL, Maine FRANK R. LAUTENBERG, New Jersey HARRY REID, Nevada BOB GRAHAM, Florida JOSEPH I. LIEBERMAN, Connecticut HOWARD M. METZENBAUM, Ohio HARRIS WOFFORD, Pennsylvania BARBARA BOXER, California

JOHN H. CHAFEE, Rhode Island ALAN K. SIMPSON, Wyoming DAVE DURENBERGER, Minnesota JOHN W. WARNER, Virginia ROBERT SMITH, New Hampshire LAUCH FAIRCLOTH, North Carolina DIRK KEMPTHORNE, Idaho

PETER L. SCHER, Staff Director STEVEN J. SHIMBERG, Minority Staff Director and Chief Counsel

SUBCOMMITTEE ON CLEAN WATER, FISHERIES, AND WILDLIFE

BOB GRAHAM, Florida, Chairman

GEORGE J. MITCHELL, Maine FRANK R. LAUTENBERG, New Jersey HARRY REID, Nevada JOSEPH I. LIEBERMAN, Connecticut HARRIS WOFFORD, Pennsylvania JOHN H. CHAFEE, Rhode Island DAVE DURENBERGER, Minnesota LAUCH FAIRCLOTH, North Carolina DIRK KEMPTHORNE, Idaho

### CONTENTS

	Page					
JUNE 15, 1994						
OPENING STATEMENTS						
Baucus, Hon. Max, U.S. Senator from the State of Montana	$\begin{array}{c} 3 \\ 10 \\ 1 \\ 12 \end{array}$					
WITNESSES						
Babbitt, Hon. Bruce, Secretary, Department of the Interior	15 52 37 65					
Prepared statement	19					
Prepared statement	56 38					
Prepared statement Wilson, Edward O., Professor of Biology, Harvard University Prepared statement	76 35 62					
ADDITIONAL MATERIAL						
Letters: International Association of Fish and Wildlife Agencies Western Governors' Association S. 921 Statements:	8 6 90					
Endangered Species: Coalition Coordinating Council Western Urban Water Coalition	82 84 87					
JULY 19, 1994						
CONSERVATION ON PRIVATE LANDS						
OPENING STATEMENTS						
Chafee, Hon. John H., U.S. Senator from the State of Rhode Island Faircloth, Hon. Lauch, U.S. Senator from the State of North Carolina Kempthorne, Hon. Dirk, U.S. Senator from the State of Idaho Graham, Hon. Bob, U.S. Senator from the State of Florida Reid, Hon. Harry, U.S. Senator from the State of Nevada	118 119 120 117 122					

#### WITNESSES

Progress, Inc Prepared st Buster, Bob, Su						Economic
Propared of			•••••		••••••	
Trepared st	atement	:		J -C C ·		•••••
Buster, Bob, Su	pervisor, Kive	erside County	, Boar	d of Supervi	sors	
Prepared st Calvert, Hon. K	atement		41-	. 04-46 0	1: 6	•••••
Jaivert, Hon. K	en, U.S. Repr	esentative ir	om tn	e State of Ca	uiiornia	•••••
Prepared st	atement			- C T J - L -	•••••	•••••
Craig, Hon. Lar	ry, U.S. Sena	tor from the	State	of Idano	•••••	
Prepared st	atement	•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	
Davidson, Mary	A	••••••	• • • • • • • • • • • • • • • • • • • •		•••••	•••••
Prepared st	atement	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	
Letter to Se	nator Grahai	ņ	······			0.77771.1
Fischer, Hank,	Northern Ro	ckies regiona	d repr	esentative,	Detender	s of Wild-
life			• • • • • • • • • • • • • • • • • • • •	••••••		
Prepared st	atement	•••••	•••••	•••••		
Garcia, Yshmae	l		• • • • • • • • • •	•••••	•••••	
Prepared st	atement					
Pombo, Hon. Ri	chard W. U.S	. Representa	tive fr	om the State	e of Calif	formia
Prepared st	atement					
Marsh, Lindell						
Prepared_st	atement					
McCandless, Ho	n. Al, U.S. R	epresentative	from	the State of	Californ	ua
Prepared st Meister, Ned, d	atement					
Meister <u>,</u> Ned, d	irector, comn	nodity and re	egulat	ory activities	s, Texas	Farm Bu-
reau Federati	on					
Prepared st	atement					
O'Connell, Micl						
The Nature C	onservancy					
Prepared st Spear, Michael, Prepared st	atement					
Spear, Michael,	Regional Dir	ector, U.S. F	ish an	d Wildlife S	ervice	
Prepared st	atement					
				••••••••		
Suwyn, Mark, e	executive vice	president, ic	orestry	z and specia	ity prodi	icts, inter-
Suwyn, Mark, e national Pane	executive vice	president, id	orestry	and specia	ity prodi	icts, inter-
Suwyn, Mark, e national Pane	executive vice	president, id	orestry	and specia	ity prodi	icts, inter-
Suwyn, Mark, e national Pane	executive vice er atement	president, io	orestry	and specia	ity prodi	icts, inter-
Suwyn, Mark, e national Pane	executive vice er atement	president, id	orestry	and specia	ity prodi	icts, inter-
Suwyn, Mark, 6 national Pape Prepared st	executive vice er atement	ADDITIONA	L MA	TERIAL	ity prodi	icts, Inter-
Suwyn, Mark, e national Pape Prepared st General Accoun	executive vice ratement ting Office re	ADDITIONA	L MA	TERIAL	ity produ	icts, Inter-
Suwyn, Mark, e national Pape Prepared st General Accoun Letters relative	ting Office re	ADDITIONA portony of Yshm	L MA	TERIAL	ity produ	icts, Inter-
Suwyn, Mark, e national Pape Prepared st General Accoun Letters relative	ting Office re	ADDITIONA portony of Yshm	L MA	TERIAL	ity produ	icts, Inter-
Suwyn, Mark, e national Pape Prepared st General Accoun Letters relative Bahner, Ro Benjamin.	executive vice ir atement  ting Office re to the testim bert H. and F	ADDITIONA port ony of Yshm 'elice	L MA	TERIAL	ity produ	icts, inter-
Suwyn, Mark, 6 national Pape Prepared st  General Accoun Letters relative Bahner, Ro Benjamin, 1 Domenigon	executive vice oratement  ting Office re to the testim bert H. and F. Marty	ADDITIONA port ony of Yshm 'elice	L MA	TERIAL	ity produ	icts, inter-
Suwyn, Mark, 6 national Pape Prepared st  General Accoun Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An	ting Office re to the testim bert H. and F Marty	ADDITIONA port ony of Yshm 'elice	L MA	TERIAL	ity produ	icts, inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An	ting Office re to the testim bert H. and F. Marty, i, Cindy G	ADDITIONA port ony of Yshm 'elice	L MA	TERIAL	ity produ	icts, inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil	ting Office re to the testim bert H. and F. Marty	ADDITIONA port ony of Yshm 'elice Maggie C.	L MA	TERIAL	ity produ	icts, inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A	ting Office re to the testim bert H. and F. Marty i, Cindy G. na M.	ADDITIONA port ony of Yshm 'elice	L MA	TERIAL	ty produ	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I	ting Office re to the testim bert H. and F. Marty i, Cindy G llard C. and I. Esther	ADDITIONA port ony of Yshm elice	L MA	TERIAL	ty produ	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I	ting Office re to the testim bert H. and F Marty i, Cindy G llard C. and l	ADDITIONA port ony of Yshm 'elice	L MA	TERIAL	ty produ	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke	ting Office re to the testim bert H. and F Marty i, Cindy G na M llard C. and I E Esther to the testim	ADDITIONA port ony of Yshm 'elice Maggie C	L MA	TERIAL  rcia:	ity produ	icts, inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative	ting Office re to the testim bert H. and F. Marty i, Cindy G na M illard C. and I I E Esther to the testim	ADDITIONA port ony of Yshm elice Maggie C	L MA ael Ga	TERIAL  rcia:  farsh:	ity produ	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative Building In	ting Office re to the testim bert H. and F. Marty i, Cindy G llard C. and I. Esther csther to the testim do of Florida dustry Associ	ADDITIONA port ony of Yshm elice Maggie C ony of Linde	L MA ael Ga	TERIAL  rcia:  farsh:  California, I	nc	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative Building In	ting Office re to the testim bert H. and F Marty i, Cindy G. na M. llard C. and I I E.  Sther nneth M. to the testim ds of Florida dd Habitats Le	ADDITIONA port ony of Yshm 'elice Maggie C ony of Linde	L MA ael Ga	TERIAL  arcia:  Marsh:  California, I	nc	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building In Endangere Defenders	ting Office re to the testim bert H. and F Marty i, Cindy Ga M llard C. and l E Sther to the testim ds of Florida dustry Associ d Habitats Le of Wildlife	ADDITIONA port ony of Yshm 'elice Maggie C ony of Linde	L MA ael Ga	TERIAL  arcia:  Marsh:  California, I	nc	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building In Endangere Defenders of Degrove, Jill A Degrove	ting Office re to the testim bert H. and F. Marty i, Cindy G na M illard C. and I I E Esther nneth M to the testim ds of Florida dustry Assoc d Habitats Le of Wildlife byn M	ADDITIONA port ony of Yshm elice Maggie C ony of Linde	L MA ael Ga	TERIAL  rcia:  Marsh:  California, I	nc	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building Ir Endangere Defenders Degrove, Jo National	ting Office re to the testim bert H. and F. Marty i, Cindy G llard C. and I l E Esther nneth M to the testim ds of Florida ddustry Associ d Habitats Le of Wildlife both M	ADDITIONA port ony of Yshm elice Maggie C ony of Linde liation of Sour	L MA ael Ga	TERIAL  rcia:  farsh:  California, I	nc	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building Ir Endangere Defenders Degrove, Jo National A Scarboroug	ting Office re to the testim bert H. and F. Marty i, Cindy G na M illard C. and I I E Esther nneth M to the testim ds of Florida dustry Assoc d Habitats Le of Wildlife byn M	ADDITIONA port ony of Yshm elice Maggie C ony of Linde liation of Sour	L MA ael Ga	TERIAL  rcia:  farsh:  California, I	nc	icts, Inter-
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building In Endangere Defenders Degrove, Jo National A Scarboroug Statements	ting Office re to the testim bert H. and F Marty llard C. and I I E Sther to the testim ds of Florida dustry Association of I h, Karen, ass	ADDITIONA port ony of Yshm 'elice Maggie C ony of Linde fation of Sour	L MA ael Ga	TERIAL  arcia:  Marsh:  California, I	nc	California
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative Building In Endangere Defenders Degrove, Jo National A Scarboroug Statements: Kolde, Bris	ting Office re to the testim bert H. and F. Marty i, Cindy G llard C. and I l E Esther nneth M to the testim ds of Florida ddustry Associ d Habitats Le of Wildlife both M	ADDITIONA port ony of Yshm 'elice Maggie C ony of Linde fation of Sour	L MA ael Ga	TERIAL  arcia:  Marsh:  California, I	nc	California
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building Ir Endangere Defenders Degrove, Jo National A Scarboroug Statements:  Kolde, Bria	ting Office re to the testim bert H. and F. Marty i, Cindy G illard C. and I. I. E Esther nneth M to the testim ds of Florida ddustry Associ d Habitats Le of Wildlife both M. ssociation of I h, Karen, ass	ADDITIONA port	L MA ael Ga	TERIAL  rcia:  farsh:  California, I	nc	California
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building In Endangere Defenders Degrove, Jo National A Scarboroug Statements:  Kolde, Bria National:  Associa	ting Office re to the testim bert H. and F. Marty i, Cindy G illard C. and I. I. Esther nneth M. to the testim ds of Florida dustry Associ d Habitats Le of Wildlife besociation of I h, Karen, ass ation of State	ADDITIONA port	L MA ael Ga	TERIAL  rcia:  farsh:  California, I	nc	California
General Account Letters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building In Endangere Defenders Degrove, J. National A Scarboroug Statements:  Kolde, Bris National:  Associa Cotton	ting Office re to the testim bert H. and F Marty i, Cindy G. na M. llard C. and I I E. Sther nneth M. to the testim doustry Associ d Habitats Le of Wildlife hn M. ssociation of I h, Karen, ass in E  ation of State Council	ADDITIONA port ony of Yshm elice Maggie C ony of Linde istion of Sourague Home Builde istant to the	L MA ael Ga	TERIAL  arcia:  Marsh:  California, I	nc Diego,	California
General Accountetters relative Bahner, Ro Benjamin, Domenigon Klimko, An Marvin, Mi Rennie, Bil Saiz, Jill A Sandoval, I Tessier, Ke Letters relative 1000 Frien Building In Endangere Defenders Degrove, J National A Scarboroug Statements: Kolde, Bris National: Associa	ting Office re to the testim bert H. and F. Marty i, Cindy G illard C. and I. I. Esther nneth M. to the testim ds of Florida dustry Associ d Habitats Le of Wildlife besociation of I h, Karen, ass ation of State	ADDITIONA port ony of Yshm elice Maggie C ony of Linde istion of Sourague Home Builde istant to the	L MA ael Ga	TERIAL  arcia:  Marsh:  California, I	nc Diego,	California

#### SEPTEMBER 29, 1994

#### CONSERVATION ON PRIVATE LANDS

OPENING STATEMENTS	Page
Chafee, Hon. John H., U.S. Senator from the State of Rhode Island Faircloth, Hon. Lauch, U.S. Senator from the State of North Carolina Graham, Hon. Bob, U.S. Senator from the State of Florida Kempthorne, Hon. Dirk, U.S. Senator from the State of Idaho	310 327 308 311
WITNESSES	
Barry, Hamlet J., III, treasurer, Western Urban Water Coalition	339 411
partment of the Interior Prepared statement	319 384
Brinkmeyer, Mark, president, Riley Creek Lumber Co	337 408
Davison, Bob, Deputy Assistant Secretary for Fish and Wildlife and Farks, Department of the Interior	314 370
Fenn, Dennis P., Acting Associate Director, Natural Resources, National Park	320 388
Prepared statement Foster, Nancy, Deputy Assistant Administrator for Fisheries, National Marine Fisheries Service	316
Prepared statement	376 341 417
Responses to additional questions from Senator Kempthorne	424 344
Cattlemens Association	431 323 396
Prepared statement Minerva, Dana, Counsel to the Administrator, Environmental Protection Agency Prepared statement	324 404
Murray, Hon. Patty, U.S. Senator from the State of Washington	304 346 434
Prepared statement	299 368
Prepared statement Unger, David G., Associate Chief, Forest Service, Department of Agriculture Prepared statement Walsh, Peter, Assistant Deputy Under Secretary of Defense for Environmental Challety	318 381
Prepared statement	317 378
Zirschky, John, Acting Assistant Secretary of the Army Prepared statement	322 392
ADDITIONAL MATERIAL	
Congressional Research Service, paper entitled "Forest Fires and Forest Health Activities"	481
and Salmonids"	353
American Forest and Paper Association	437 487 440
Endangered Species Coordination Committee  Multi-Trade Association Endangered Species Act Task Force  National Wildlife Federation	487 451
United Brotherhood of Carpenters and Joiners of America Wild Forever Wilderness Society	474 476 479

#### ENDANGERED SPECIES ACT AMENDMENTS OF 1993

#### WEDNESDAY, JUNE 15, 1994

U.S. SENATE,

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,

SUBCOMMITTEE ON CLEAN WATER, FISHERIES AND WILDLIFE,

Washington, DC.

The subcommittee met, pursuant to notice, at 9:40 a.m. in room SD-406, Dirksen Senate Office Building, Hon. Bob Graham [chairman of the subcommittee] presiding.

Present: Senators Graham, Chafee, Kempthorne, and Baucus [ex

officio].

## OPENING STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

Senator GRAHAM. I will call the meeting to order.

This is a meeting of the Subcommittee on Clean Water, Fisheries, and Wildlife of the Senate Committee on Environment and Public Works. We begin today a series of hearings on the reauthor-

ization of the Endangered Species Act.

Last year, we held a series of hearings on the reauthorization of the Clean Water Act and as in that case, we will be holding hearings over this summer and fall in expectation of having legislation available for the next session of Congress. We believe that the perspective of these hearings, which will look at the original purposes of the Endangered Species Act, whether those purposes continue to be valid today, how well the current Act has functioned in terms of achieving its goals and what changes administratively or legislatively are appropriate will be the focus of our hearings.

To assist us in commencing this series of hearings, we have assembled for this morning, a small but distinguished group of witnesses to help us assess the Act. It is my hope that we can have a full discussion on why this Act is considered important, whether its goals still apply today, and how we can improve our ability to

achieve these goals.

We are pleased to have with us today Interior Secretary, Bruce Babbitt and Mr. Douglas Hall of the Department of Commerce.

These agencies share jurisdiction for the Act.

Yesterday, Secretary Babbitt and Commerce Under Secretary Baker announced a package of reforms by these two agencies designed to improve the implementation of the current Act. I applaud the Administration for undertaking these initiatives and look forward to a discussion of the problems with the Act that they are in-

tended to address and how they might be expected to improve its

implementation.

In particular, I am pleased that the Administration is moving more towards an ecosystem approach as a means of avoiding crisis management in the way in which the Act has been administered. In March, I had the occasion to visit the Pacific Northwest and saw firsthand how this wider systems approach might be the best two available for us in our efforts to address concerns under the Endangered Species Act.

The alternative to this systems approach is to continue the implementation of the Act as if it were in an emergency room. If we do that, we will continue to unnecessarily raise anxieties by all those who are concerned for the health of the patient as well as those who must pay the bill. Even worse, we will continue to lose many of the patients. The systems approach seems to move us towards preventive health care, a subject about which we will have more as these discussions unfold.

In that regard, I want to reemphasize that it is my desire that subsequent hearings on the reauthorization of this Act be very issue-specific. For example, we will focus on the protection of habitat versus individual species; we will devote our attention to the impact on private property, both from the perspective of those who are concerned about takings and from those who seek incentives to encourage conservation on private land.

Our second panel this morning should prove to be extremely helpful in understanding why the protection of species is important, why it was considered important over 20 years ago and why this Act was initially placed on the books, and how it has been im-

plemented to achieve these goals.

We are pleased to have with us one of the preeminent biologists in the world today, Professor Edward Wilson. Professor Wilson is the author of many books and articles relevant to our inquiry, including "The Diversity of Life." Without trying to sound like his publisher, I must say that his writings are both engaging and entertaining. His statement is filled with information vital to our inquiry. We hope to learn the science of the Act from him today.

Finally, we will be pleased to have one of our former colleagues, Senator James McClure, as well as Mr. Michael Bean, to help us understand the history of the Act and its intended purpose. We are fortunate to have two such extraordinarily thoughtful and knowledgeable experts on the Act who will likely provide the subcommittee with somewhat different views and perspectives. It is my hope they will help acquaint the subcommittee with an understanding of the Act and some of the controversy that surrounds it as we prepare to engage in this reauthorization effort.

Perhaps going into reauthorization efforts, we can all agree that the Endangered Species Act is controversial. It has been labeled by some as the crown jewel of the Nation's environmental laws. They view it as essential to the protection of the diversity of life. They view it as a success. Others view it as a failure or at best, a flawed Act that overreaches its original intent. One previous witness has repeatedly been quoted as having called the Act "the pit bull of en-

vironmental laws."

Certainly, the statistics are alarming. Many scientists believe that we are losing species to extinction at almost unprecedented rates, perhaps as many as 100 species a day. That would be another 12 during the period that we are holding this hearing this morning. Professor Wilson tells us that while the loss of species is natural, the current rates are substantially increased due to human interaction. One thing that we do know is that once a species is gone, other life is affected perhaps in ways that we will never know. It is my hope that Professor Wilson can help us appreciate the significance of these interactions.

Perhaps we can also agree that one of the principal goals of the Act was the recovery of threatened and endangered species. I suspect we will see today why it is so controversial to even assess success or failure in achieving that goal. Citing essentially the same statistics, both sides explain that their case for success or failure

is made. We will not today resolve this dispute.

Today's hearings are intended to lay the foundation upon which we will begin to resolve the disputes that exist. As I stated, we will begin today with the efforts of this Administration to do just that in a number of areas. Next month, we will begin in earnest our review of some of the issues we must confront, many of which will be raised today.

I would like to call upon the Chairman of the Environment and Public Works Committee, Senator Max Baucus of Montana, for any

opening statement.

## OPENING STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Senator BAUCUS. Thank you very much, Mr. Chairman.

I first want to commend you on your diligent work on this issue. This is not an easy issue and you are to be commended for jumping

into the foray.

Second, this is exemplary of your yeoman's work on the Clean Water Act. Last year, you held a number of hearings that were very helpful to this committee in marking up the Clean Water Act. We did mark up the Clean Water Act with a substantial majority of the members of this committee approving it, and we hope to be taking that to the floor quite soon. Again, it's because of your good work and I commend you for it.

Today's hearing marks the first step in the journey toward reauthorizing the Endangered Species Act. I'm pleased that the Endangered Species Act reauthorization is also in such good hands as I

said, as it was in your work on the Clean Water Act.

As you begin today's hearing, the Endangered Species Act is at a crossroads. After two decades of experience, reviews of the Endangered Species Act are quite mixed. As you said, Mr. Chairman, some have called the Endangered Species Act the crown jewel of our Nation's environmental laws; others have called it the pit bull of environmental law, with sharp teeth and little to like about it.

My own view is that the Endangered Species Act is critically important. Its basic purpose, to conserve threatened and endangered species and the ecosystems upon which they depend, is a goal that I strongly support. Why? Because protecting the Earth's biological

diversity provides benefits of incalculable value to us, to our chil-

dren and to future generations.

We depend on the plants and animals around us for many things. Just a few examples. Aspirin was derived from the willow tree; Paxol, a promising treatment for ovarian cancer comes from the bark of the Pacific Yew; corn and wheat crops in this country have been saved from blights by crossbreeding with wild corn from Mexico and a wild strain of wheat from Brazil; fresh water mussels are the basis for a cultured pearl industry that provides 10,000 jobs and \$700 million to the United States economy annually. Each year, Americans spend more than \$55 billion to hunt, fish, bird watch and enjoy wildlife and its habitats. By protecting the biological diversity, the Endangered Species Act provides benefits like these to us all.

Nonetheless, we hear a lot about major endangered species controversies like the spotted owl. What we seldom hear is how few conflicts between endangered species and development have actually occurred. Between 1979 and 1991, the Federal Government reviewed more than 120,000 projects for conflicts with endangered species. Only 34 were cancelled. In other words, 99.9 percent went forward. That is an impressive record by anyone's measure. The initiatives announced yesterday by the Administration will, I believe, help reduce potential endangered species conflicts even more.

Does this mean the Act is perfect? No. Can it be improved? You bet. For example, in my own State of Montana, people are frustrated, they are angry at recent steps to provide more water to endangered salmon in the Columbia River system. Providing more water for salmon could have serious negative effects on Montana's recreation and tourism economy if reservoirs are drawn down. It could raise our electric power rates, perhaps driving the Columbia Falls Aluminum Company out of business. It could harm our resident fish and wildlife, including the bull trout which is a candidate for listing as an endangered species.

Let there be no mistake. Montana is ready to do its part to save the salmon but if the Endangered Species Act is going to work in Montana and the rest of the country, Federal officials had better be prepared to really listen to State and local concerns. That has not always happened with the salmon controversy in Montana.

Another concern in Montana and elsewhere is the impact of the Act on private property. It is important to note that there has never been a case under the Act in which a court has found that the Act has resulted in unconstitutional taking of private property. At the same time, landowners are afraid that when a new species is listed in their area, their use of their land will be hamstrung. The problem is that so far, the Act has been short on carrots and long on sticks. It is time to start looking for more incentives rather than relying solely on penalties to encourage landowners to conserve species on their property.

To address these problems in a way that will maintain the Act's vital role concerning conserving the biological diversity, Senator Chafee and I introduced S. 921, the Endangered Species Act

Amendments. Our bill will improve the Act in several ways.

First, it will build a stronger partnership with the States and endangered species conservation. Many States have a long history of

solid experience in managing endangered species. Our bill will take advantage of that expertise by giving States a larger role in listing, delisting and recovery decisions. States must be full partners in the

endangered species conservation efforts.

Second, our bill will encourage earlier and more effective conservation of endangered species. Benjamin Franklin was right, "An ounce of prevention is worth a pound of cure." Our bill encourages agencies to conserve species before they decline to the point where they must be listed; it provides financial incentives for private landowners to conserve species as well. Our bill also gives priority to multispecies listings, recovery plans, and consultations. If we have learned anything over the past 20 years, it is that focusing on individual species rather than the entire ecosystem simply does not work ecologically or economically.

Our bill will also ensure that endangered species conservation decisions are based on the best science by requiring that listing

and delisting decisions be subject to scientific peer review.

Third, our bill will improve efforts to recover species so they can be delisted. It sets deadlines for completing recovery plans and requires that recovery plans contain detailed guidance for cooperative recovery efforts by Federal, State and private parties. Perhaps most importantly, our bill also requires that recovery plans include measures to minimize social and economic impacts.

Fourth, our bill will put our money where our mouth is. It dramatically increases the authorization for endangered species conservation programs. It provides financial incentives to private landowners to conserve endangered species. It establishes a \$20 million revolving loan fund for habitat conservation planning which bal-

ances species conservation and development needs.

This bill is not the final word on Endangered Species Act reauthorization, but it is a good, solid start. That is why it has been endorsed by the Western Governors Association, endorsed by the International Association of Fish and Wildlife Agencies representing all 50 State fish and wildlife departments; and why it has been endorsed by the Endangered Species Coalition representing more than 100 national, regional and grassroots environmental organizations.

At this time, Mr. Chairman, I'd like to submit their letters of endorsement and ask that they be included in the record.

Senator Graham. Without objection.

Senator BAUCUS. Other bills have been introduced which take different approaches. As these hearings progress, new ideas will emerge. When the committee completes its work, I expect to report a bill that will combine many good ideas to produce a strong and effective Endangered Species Act, an Act that effectively protects species and ecosystems in a way that respects Americans rights to use and enjoy their land.

I'm looking forward to hearing from our very distinguished panel that we have assembled before us today. I expect to learn a lot. It will be very helpful and I urge my colleagues to ask good, tough, concise and balanced questions. Let's roll up our sleeves and get

the work done.

Thank you very much.

[The letters previously referred to by Senator Baucus follow:]



File Symington Governor of Arizona Chairman

Bob Miller Governor of Nevada Vice Chairman

James M. Souby Executive Director

May 6, 1993

The Honorable Max Baucus, Chairman The Honorable John H. Chafee, Ranking Member Committee on Environment and Public Works 456 Dirksen Senate Office Building Washington, D.C. 20510

Dear Mr. Chairman and Senator Chafee:

As Chairman of the Western Governors' Association and lead governors on the issue of reauthorization of the Endangered Species Act, we support your introduction of legislation that strengthens the ESA by making it more understandable and workable. We especially commend and appreciate your efforts to reaffirm the role of the states as true partners with the federal government in implementing the Act, which we believe was the original intent of Congress.

The WGA's recommendations on reauthorization of the ESA grew out of the heat of nearly a year's debate. During that time the Association reached out to the major stakeholders in the debate and obtained their perspectives, best arguments and solutions. We worked closely with both the International Association of Fish and Wildlife Agencies (representing all 50 State agencies) and the Western Association of Fish and Wildlife Agencies.

We appreciate that your staffs sought out and consulted our staffs throughout your drafting process. Communication clearly occurred since your legislation addresses many of our concerns and policy recommendations.

Chief among the Western Governors' recommendations was that new legislation reaffirm the roles and responsibilities of the states in listing, de-listing and recovery of threatened and endangered species. Your legislation does that. We want to work with you as our Association attempts to identify means to further strengthen these provisions.

We support the incentives the bill provides states, local governments and private landowners to enhance the conservation of threatened and endangered species and its exemption of the states from the Federal Advisory Committee Act.

We are pleased that the legislation reaffirms that the question of whether a species is threatened or endangered must be a scientific decision. We are supportive of the bill's addition of peer review, whenever its need is substantiated, to assure that the decision is scientifically sound and objective. We suggest that there is a continuing role for state agencies to play in this process also.

We also commend you for developing legislation which helps the ESA meet its objectives by giving priority to species whose conservation is most likely to reduce the need to list other species and by giving priority to the development of recovery plans, where biologically accurate and practical, for clusters and related groups of species that are dependent upon a common ecosystem. The bill also furthers the goals of the Act by allowing species awaiting a listing decision to qualify for funding and protection and by requiring the designation of critical habitat and the development of recovery plans to occur concurrently.

Our Resolution also expressed concern that the de-listing and down-listing of species was proceeding at a glacial pace under the ESA even though some currently listed species are We are pleased that the bill makes the Secretary equally biologically recovered. responsible to de-list recovered species. In an equally positive fashion, the legislation builds on the current requirement that economics be considered in designating critical habitat and in adopting recovery plans, by stipulating that the Secretary must seek to minimize social and economic impacts of recovery plans. We would appreciate a reaffirmation of the distinction the Act provides for the management of endangered versus threatened species.

In order to facilitate ways to cooperatively protect habitats as a means to prevent listing of individual species, we suggest that projects, such as the Great Plains Initiative, a joint effort of WGA, the US Fish and Wildlife Service, the Environmental Protection Agency. and a broad spectrum of nongovernmental organizations, be looked at as potential pilots to study their effectiveness in meeting the objectives of proactive management.

We believe the Endangered Species Act Amendments of 1993 is an excellent starting point for the hearings the committee is about to undertake and we look forward to working with you and your committee in exploring further ways to enhance the role of states and strengthen the Act.

Sincerely,

Lead Governor



IAFWA Staff Executive Vice President R. Max Peterson

Legislative Counsel Gary J. Taylor

Resource Orrector Mark J. Reeff

International Resource Director

Donald E. MacLauchlan Middida

Diversity Coordinator Naomi A. Edelson

Counselor Emeritus Jack H. Berryman

MAIMMP Coordinator Kirk S. Andries

Officers 1992-93 President Steve N. Wilson #2 Natural Resources Drive Little Rock, AR 72205 First Vice-President Jerry M. Conley Box 25, 600 South Walnut Boise, ID 83707

Chester F Pheins 103 Oakdale Drive Williamston, NC 27892 General Counsel Glenn I Bowers 221 Mountain Road Dillsburg, PA 17019

Secretary-Treasurer

Executive Committee 1992-93 Chairman Robert L. Miles Charleston, WV 25305

Vice-Chairman Larry Wilson Wallace State Office Building Des Moines, IA 50319-0034 Peter S. Duncan Harrisburg, PA Wayne F. MacCallum Boston, MA .lim MacLean

Toronto, Ontario Don R. McCormick Frankfort, KY William A. Molini Reno, NV

William Montoya Santa Fe. NM Jerry J. Presley Jefferson City, MO

#### International Association of Fish and Wildlife Agencies

(Organized July 20, 1992)

Hall of the States • 444 North Capitol Street, N.W., Suite 544 • Washington, D.C. 20001 Telephone (202) 624-7890 • FAX (202) 624-7891

May 6, 1993

Honorable Max Baucus, Chairman Honorable John Chafee, Ranking Member Environment and Public Works Committee United States Senate Washington DC 20510

Dear Senator Baucus and Senator Chafee:

The Association commends your introduction of Endangered Species Act reauthorizing legislation which makes substantial improvements in the law without reducing its strength. These provisions reaffirm the role of the State fish and wildlife agencies in the conservation of threatened and endangered species and their habitats; improves the Act's administration and workability; and provides incentives to more appropriately and actively involve private landowners in meeting the Act's conservation objectives. The Association supports the existing Act and its objectives, but recognizes and supports improvements in its administration which make it both more effective and workable.

The role of the State fish and wildlife agencies is vital to meeting the objectives of the Act. As you are aware, it was the intent of Congress that the objectives of the Act be met through the full cooperation of the States with the USFWS and NMFS. Your bill reaffirms that cooperation in all aspects of the Act and its processes, and ensures that the Federal Advisory Committee Act is not an impediment to this government to government cooperation. The State fish and wildlife agency involvement adds, in our opinion, scientific information and supports the science involved in and the processes established under the Act. 1900 Kanawha Boulevard East This will increase the success of the Act in meeting its objectives.

> We appreciate and support the provision in the bill which gives greater Opportunities to apply the Habitat emphasis to preventive management. Conservation Planning process to candidate species; and the focus on recovery actions for species occupying the same habitat should facilitate conservation actions to recover species and habitats before the need to list is required.

Honorable Max Baucus/Honorable John Chafee May 6, 1993 Page 2

The Association enthusiastically supports equalizing the de-listing responsibility of the Secretary with the listing responsibility, and also the attention directed to designing and implementing species recovery programs. The manifestation of the Act's success is in recovering and de-listing species, not adding more species to the list. Recovery needs to be advanced at a much greater rate than it has proceeded.

We fully support the initiatives to provide for greater involvement of the private landowner in meeting the conservation objectives of the Act. We cannot meet the objectives of fish, wildlife and habitat conservation without involving the private landowner, and your bill is a good step in that direction. We encourage you to continue to look at other initiatives (such as tax incentives) to further this goal.

Finally, we appreciate the recognition of the need for additional funding to meet the objectives of the Act. We must simply dedicate more money to natural resources conservation in the United States if we are to ensure that our future generations are also able to enjoy the magnificent natural treasures of this nation.

The Association applauds your efforts which culminated in the introduction of this bill, and look forward to continuing to work with you and your staff to successfully enact this legislative proposal.

Sincerely,

R. Max Peterson

Executive Vice President

cc: State Government Members

Senator GRAHAM. Thank you, Mr. Chairman.

The Ranking Member of the full committee and the subcommittee is the distinguished Senator from Rhode Island, John Chafee.

## OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Thank you very much, Mr. Chairman.

I notice that the Secretary is here, so I would ask that my statement be included in the record.

Senator GRAHAM. It shall be included.

Senator Chafee. I just like to make a couple of remarks, if I

might, Mr. Chairman.

First of all, I congratulate you for having these hearings. I think that this Act is a very, very important Act. Is it perfect? No, but it's a landmark piece of legislation. I looked it up in the record, Mr. Chairman, and it was enacted 21 years ago, in 1973. It passed the Senate 92 to 0. Mr. Chairman, you can hardly get a motherhood resolution passed in this place 92 to 0. It passed in the House 355 to 4. So in taking that action, Congress took the long-term view of the problem and developed a solution that recognizes our responsibilities to conserve natural resources for future generations. There are other people coming along in the United States after us and I think we want to leave this country and the globe in better shape than we found it and that is what the Endangered Species Act does.

I'd like to make a couple of points if I might. First, this has been a remarkably successful Act and the number of species, and you can tick them off whether it's the brown pelican or the American alligator or the peregrine falcon or the whooping crane, among others, have made dramatic comebacks under this Act. Our national symbol, the bald eagle, has increased from fewer than 1,600 adults in 1974 to over 7,000 now. Indeed, in my State, for the first time on record anyway, bald eagles have been spotted and indeed we believe some are nesting there.

Is the Act going to rescue every imperiled species? No, but there have been significant successes given the limited funding that has

been available and Senator Baucus talked about that.

Can the Act be improved? Sure, it can. I congratulate the Administration, Secretary Babbitt and others for their efforts to find ways to make it work more effectively and more efficiently and of course, that's the approach that Senator Baucus and I took when we intro-

duced the legislation to reauthorize it last year.

Finally, the point I'd like to make is this. For the Act to conserve endangered and threatened species, it also has to do something about the ecosystems upon which they depend. It seems to me we need to place greater emphasis on the conservation of species habitat and both our reauthorization bill and the Administration's initiative would do that by encouraging listing recovery planning and habitat conservation all be done at the same time.

So Mr. Chairman, I look forward to working on this legislation

and congratulate you for the leadership you've given us.

[Senator Chafee's prepared statement follows:]

STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Today we meet in the first of a series of hearings on the reauthorization of one of our most important conservation laws, the Endangered Species Act. Twenty-one years ago, Congress acted to stem the loss of living species and to protect our natural heritage. The 1973 Act was approved in the Senate by a vote of 92 to 0, and in the House by 355 to 4. In taking this action, Congress took a long-term view of the problem and developed a solution that recognizes our responsibility to conserve natural resources for future generations.

It is true that some extinctions occur naturally. Not every species can or necessarily should be saved, but what we can and must do is avoid extinctions that are a direct result of human actions. The law acknowledges the fact that the presence of an endangered species is often a signal that the species' environment is in jeopardy. Ultimately all species—including humans—depend on a healthy environment for survival.

Accelerating rates of extinction should serve a warning to a all of us. Just as the canary in the coal mine alerted miners to danger, endangered species can warn us of far-reaching environmental problems.

Many species of fish, wildlife, and plants have more practical and direct benefits worth preserving, as we will hear today from biological diversity expert Dr. E.O. Wilson. For example, the catch of finfish an shellfish is the world's largest single source of animal protein. We depend upon wild plants for more than 25 percent of prescription drugs. Genetic material from a large number of species is vital to advances in agriculture and many other fields. We continue to discover new species and new uses for known species.

Given the many reasons to protect our biological heritage, it is important to ask: What is the record of the Endangered Species Act? In many ways the Endangered Species Act has proved to be a remarkable success. A number of species, including the brown pelican, the American alligator, the peregrine falcon, and the whooping crane (among others) have made dramatic comebacks under the protection of the Act. Our national symbol, the bald eagle, has increased from fewer than 1,600 in 1970 to more than 7,000 in 1994. Two adult eagles have recently been spotted in my State of Rhode Island and eagles may be nesting in the State for the first time on record. The Act has also been the model for similar laws that have been adopted around the world.

The Act has not, nor will it ever, rescue every imperiled species, but there have been significant successes given the limited funding available for recovery efforts.

Despite the recent controversy surrounding the Act, serious conflicts with public and private development projects are the exception, not the rule. A 1992 GAO report found that over 90 percent of the formal consultations conducted under the Act resulted in a finding of "no jeopardy" to the species and the proposal, project, or action was approved. Furthermore, GAO reported that almost 90 percent of the opinions concluding that a proposed action would jeopardize a species provided reasonable and prudent alternatives that, if implemented, would allow the action to proceed.

This does not mean that the Act cannot be improved. I congratulate the Administration on its efforts to find ways to make the Act work more effectively and efficiently, without weakening our commitment to species conservation. This is similar to the approach that Senator Baucus and I took in the bill to reauthorize the Act we introduced last year. We recognize that the Act can work better both for species and landowners, but any changes should build on the existing strengths of the Act—rather than weakening fundamental protection for species.

Many elements of the Act have not received adequate attention. For example, the purpose of the Act is to conserve endangered and threatened species and the ecosystems upon which they depend. We need to place greater emphasis on the conservation of species' habitat. Both our reauthorization bill and the Administration's initiative would do this by encouraging that listing, recovery planning, and habitat conservation planning would all be done, where possible, for groups of species that are dependent upon the same habitat or ecosystem. This would both increase the number of species protected and lower the cost of protecting them.

There are many other changes—both legislative and administrative—that can make the Act work better and minimize social and economic consequences of conservation. We will be considering a number of proposals during the reauthorization process. Yet, as we examine possible changes to the Act, it is important for us to remember that the protection provided by the Endangered Species Act is the last resort to save a species. Left unprotected, these species and their value to present and future generations would be lost forever.

Senator Graham. Thank you very much, Senator Chafee. We have been joined by Senator Kempthorne of Idaho for an opening statement.

## OPENING STATEMENT OF HON. DIRK KEMPTHORNE, U.S. SENATOR FROM THE STATE OF IDAHO

Senator KEMPTHORNE. Mr. Chairman, thank you very much. Mr. Secretary, it's nice to be with you this morning as well. Mr. Chairman, I'm pleased that you've convened this hearing,

Mr. Chairman, I'm pleased that you've convened this hearing, the first of several in our effort to reauthorize the Endangered Species Act. I look forward to the hearings that we will have here. Also, I think it is extremely important that we have the field hearings where we can see firsthand the application of the Endangered Species Act and the management that is taking place as well as the

impact of that.

In the past two years, I've crisscrossed the State of Idaho many times. I'm not exaggerating when I say that no other existing law invokes such passion and controversy in my State as the Endangered Species Act, both sides of the issue. Almost every region of Idaho has had significant experience with the Act and the agencies of the Federal Government that administer it. These experiences encompass some of the most complex and difficult issues raised by the Act, as well as a few successes. For instance, we are home to the Peregrine Fund, whose biologists can boost one of the few successes of endangered species recovery, the peregrine falcon. We're also home to one of the most ambitious recovery operations in the history of the Act: the recovery of the endangered Pacific salmon.

Between the salmon, the bull trout, the Kootenai sturgeon, the grizzly bear, the gray wolf and the caribou, the bald eagle, the peregrine falcon, the Bruneau snail, most Idahoans have felt the full impact of the Act. This is partly owing to the large Federal presence in Idaho—67 percent of the lands being Federally-owned and managed. This means that many section 7 interagency consultations on Federal land management activities that might affect en-

dangered or threatened species.

Idahoans' experience with the Act is also derived from their involvement in natural resource industries—ranching, logging, farming, mining. They've been stewards of the land for a long time. They live in rural areas and are in daily contact with the wildlife around them. They are also committed to doing their part to protect and recover endangered species. Unfortunately, the stories they tell me convey a picture of Endangered Species Act implementation that wastes time and resources and which itself sometimes jeopardizes the endangered species.

Just this summer, the National Marine Fisheries Service forced the Corps of Engineers to spill extra water through the dams in the Columbia River Basin to speed the transit of young salmon smolts. It did this despite strong warnings that the spill levels would produce a disease in the salmon called "gas bubble disease," at worst killing them, and at best, severely weakening them for easy predation. A week and a half later these dire predictions came true. NMFS' aggressive experiment, wholly unsupported by the science, paid out terrible results.

Endangered Species Act stories are tales of endless planning and bureaucratic red tape, inadequate or poor quality science, substantial inference on the part of Federal officials with activities on private property, threatened and endangered communities of people, and Federal officials who consult and consult and consult and con-

sult, but with no one in the lead.

I hosted a meeting in Idaho early last year with representatives of the different Federal agencies in the section 7 consultation process in Idaho. Mr. Chairman, I asked those different agencies on this process, who is the lead agency and I got a different answer from each agency representative. They are just as frustrated as we are, and they are good people that do know how to manage if, in fact, we can find them a course. The buck has no where to stop. As a consequence, no one adds up the cost of the individual decisions.

Since that meeting, I've been working to streamline the consultation process to establish threshold criteria that would allow for automatic approval of an activity, like a timber sale, rather than force the proposing party to get approval from each individual agency. Activities that meet the criteria would receive the streamlined treatment.

Mr. Chairman, I'd like to show, if I may, the committee members an overview of what does the Endangered Species Act really mean to a county in Idaho so that we can see the impact that it has.

[Slide demonstration of charts and maps.]

Senator KEMPTHORNE. I've chosen Boundary County which is our most northern county that is bordered by our neighbor Montana and by the Canadian border. It is home to 8,000 people and some of the Nation's best timber. In Idaho, this is the seventh largest county for timber production with 3.6 billion board feet. Federal land accounts for 60 percent of the total.

In 1993, the Forest Service recommended harvesting 37 million board feet, or just 1 percent of the suitable timber. In actuality,

only 19.3 million board feet, or .54 percent, was harvested.

The reason for such a low harvest is directly related to the Endangered Species Act and other Federal land-use decisions. The area includes significant management areas set aside for the grizzly, caribou, and the not-yet-listed bull trout. These areas are stringently managed, consistent with Endangered Species Act habitat restrictions.

Despite being tightly controlled, all timber sales are still appealed, resulting in years of delay and increased costs, ultimately to the consumer. Of the timber sales proposed, 100 percent were appealed last year, and 90 percent the year before. Of these appeals, only 22 percent were made by individuals or groups that live and work in the county. The remaining 78 percent was appealed by individuals or groups from out of State, from as far away as New York.

That just gives you a view of the suitable timber land in Boundary County and that is suitable after going through the public process of the forest plans. Now we begin to overlay some of the im-

pacts.

There is the grizzly bear-protected habitat. I don't mean to suggest that now all of that timberland is off limits because of the grizzly bear habitat, but it is severely restricted. Logging can only take place now in winter while the bear is hibernating. That is good for the bear, but bad for loggers and consumers. Decreased

productivity means high lumber prices.

Now we go to the next overlay which is the caribou-protected habitat, next the bull trout-protected habitat, you add them all together and I think the next slide will show you the total effect of Federal regulations in that county. As for salmon recovery, the Forest Service is considering using 300-foot buffer strips along all fish-bearing streams to protect fish habitat, although scientists in Idaho say buffer strips of this magnitude are inappropriate and mean a loss of both timber and recreation jobs.

Add roadless areas, which are effectively managed as wilderness areas, and Federal water quality regulations, including potential designations of ONRWs, and you see the comparison of the suitable timberland before and after Federal regulation in Boundary County. The picture is clear—suitable timberland in Boundary County is being smothered by layers of Federal bureaucracy. The timber

sale volume is off 42 percent just in one year.

The thing I also want to add is in Boundary County, 8,322 people live there, many of them third-, fourth-, or fifth-generation Idahoans that have been stewards of the land. They can show you some of the best fishing spots, and they are not going to let anyone damage those fishing spots, but they also believe that it can be a pro-

ductive environment.

I want to quickly show you Clearwater County. Timber sales are off 75 percent from the Forest Service recommended levels. The Forest Service has professionals trained in how to manage this. There is the suitable timberland in Clearwater County, Idaho denoted in green. We see the bull trout-protected habitat, the wolf-protected habitat, the grizzly bear-protected habitat, the salmon-protected habitat, so there is the endangered species effect on Clearwater County.

We often hear the argument that in those areas of the country that have been traditionally resource-based economies, you should move to recreation. Well, in this county we have Dworshak Reservoir and Dam which has created a wonderful lake; it's multipurpose in its use and it has given them some real opportunities for recreation in Clearwater County. You see what we're doing to im-

pact the timber area.

Now, because of the recovery of salmon, the Corps of Engineers is going to, in essence, drain that reservoir putting the seven marinas totally out of business, out of water, in order to experiment in

trying to bring about the recovery of salmon.

This is the total effect of Federal legislation plus the draining of the dam, so you can see the before and after views. One more reminder, 8,500 people live there, want to continue to live there, but they are wondering if, in fact, they have a future. The Endangered

Species Act, you need to find the balance.

Like many Idahoans, I believe the Endangered Species Act serves an important and useful purpose. It has done a lot to heighten the awareness of most Americans, especially urban Americans to the wildlife with which we share the planet. It is not sacrosanct, however, and I hope the subcommittee will look forthrightly at the problems in the Act and take steps to correct them. The Endangered Species Act should not be an invitation for poor science to masquerade as good, peer-reviewed science and something upon which public policy can be reliably based. The Endangered Species Act should not be used as a means for the Federal Government to usurp local land use planning authority. The Endangered Species Act should not be used to control western water and undercut and destroy the western system of water law.

I hope that during the course of these hearings, we will examine all of these broader concerns about the scope and the purpose of the Endangered Species Act, none of which I believe was intended by the original authors of the Act. I hope also that we can discuss those amendments that will be necessary to assure that man also has a recognized place within the ecosystem that we share with plants and animals.

Mr. Chairman, I look forward to the testimony of Secretary Babbitt and also former Senator Jim McClure.

Senator Graham. Thank you, Senator.

I appreciate each of the opening statements that we have had. I think they have helped to frame the issues that we will be dis-

cussing over the next several months.

We are extremely pleased to commence this series of hearings by statements from the two Federal agencies with primary jurisdiction for the Endangered Species Act. First, we will have the Honorable Bruce Babbitt, Secretary of the United States Department of the Interior. Secretary Babbitt?

#### STATEMENT OF HON. BRUCE BABBITT, SECRETARY, DEPARTMENT OF THE INTERIOR

Secretary BABBITT. Mr. Chairman, thank you.

I've brought with me today a written statement which, if I may, I would submit for the record and in lieu of simply reading it, see if I can reflect on some experience that may perhaps be of use to

you as you undertake this.

Senator GRAHAM. Mr. Secretary, your statement and, for the record, the statements of all the participants today, will be printed in full in the record of the hearing and we would appreciate your summarization and specific highlighting of major issues that you would like to bring to the attention of the subcommittee.

Secretary BABBITT. Thank you very much, Mr. Chairman.

When I came to this town a little over a year ago and unpacked my bags, I, right off the bat, said that my judgment of the Endangered Species Act was that it is a good and powerful and flexible law that has lots of possibilities for protecting endangered species in innovative and comprehensive ways. I said then and continue to say today that it's my judgment that over the past 20 years, the sense of innovation and the possibilities that are inherent in the law really haven't been explored. The history of the administration of this Act has been narrow, grudging and defensive. My intent, as Secretary, would be to see if we can become proactive, if we can anticipate problems and use the space and innovative power of the Act to see if we can lay out some alternative methods of exercising our responsibilities.

It was for that reason that to the extent that I was asked. I said I don't think that legislative action in 1993 or 1994 is really the most urgent issue, that I would prefer, instead, to see if I can create an administrative record that would, in due course, provide the Congress the benefit of our experience, our successes and our mistakes. I think I come here today sensing that we now have begun to develop the outline to that kind of record and that this move toward reauthorization is now quite timely and I think can be productive in the context of the lessons that we've learned in admin-

istering the Act.

My basic approach to our responsibilities, I would summarize in three principles, all of which have already been alluded to in the opening statements. First of all is the need to use good, comprehensive, solid, unimpeachable, biological science. Second is to get into these problems as early as we can with the understanding that the sooner we get there, the more flexibility there is. The most woeful story of the last 20 years is that by failing to get there early, we get driven into corners from which there is not much flexibility and inevitably the litigation starts and we find ourselves trying to make up time to devise solutions in the context of very limited space. Third, as has already been mentioned, is the concept that if we get there early, ideally we should look at the entire ecosystem, not focusing on one species where you saw the problem only to cycle back a few years later, we find another and another and another, but rather to understand the related nature of this, the interdependence of all those species upon habitat in the ecosystem itself.

What I'd like to do very briefly is mention four specific cases that I think illustrate some of these approaches, none of them to perfection, but I think in each of these cases, there are substantial lessons learned and I would invite the attention of this committee to these cases and the instructive possibilities I think they hold.

The first and best known one, of course, is the Pacific Northwest Forest Plan. That's one situation where assuredly we're not on the scene early in advance of the problem, quite to the contrary, we arrived very much at the eleventh hour. There are two important lessons, I think, to be evaluated in the legislative context on the record of what has happened in the Pacific Northwest.

The first one is the use of good science and comprehensive planning. For the first time, I believe in memory, the way that we put this recovery plan together was to bring together the best scientists available in all of the Federal agencies, in the State governments, and put together under Jack Ward Thomas a team which created a plan which is now before the court. The process of the science that came together on an interagency, multidisciplinary State and Federal basis I think is important, a positive lesson of how these issues need to be addressed.

The second and obvious one is the multispecies focus of that effort. This plan was originally driven, of course, by the listing of the spotted owl, but the plan that is now in front of the court takes into account not just the spotted owl, but the marbled murrelet, several dozens of species of birds, terrestrial vertebrates, and ultimately and necessarily, the salmon runs of the Pacific Northwest which are dealt with on the west slope of the Cascades in the form of a plan for buffer zones which was ultimately expanded out, a Forest Service plan known as Pack Fish.

The plan is not a spotted owl plan; it is a multispecies, comprehensive, ecosystem plan and I would suggest again that there are some legislative lessons and direction that can be drawn from

that particular experience.

The second one that would call your attention to is the Coastal Sage Habitat planning effort in southern California. This is a large scale, habitat conservation planning process built around an endangered bird called the California gnatcatcher, but it has expanded very rapidly into a comprehensive, multispecies planning process.

The extraordinary thing that I think is suggestive about legislation in the California effort is the use for the first time in the history of this Act of a section 4(d) rule to set up a State-Federal process. By good fortune, California has on the books its own Endangered Species Act called the Natural Communities Planning Act. With that authority in the hands of the State, we were able to work out an arrangement under section 4(d) of the Endangered Species Act in which we defer to the State of California under an agreement in which they become the initiating, managing, decision-making authority out on the ground subject to a Memorandum of Understanding in which we, in effect, cede primacy for the development of that effort to the State of California. It's a model, I think, which has suggestive implication for what we can be doing in the future.

California, in turn, under their NCCP law, has a process that brings in county and city governments. It is very instructive to watch because the planning process in southern California has been ascent to the State through the 4(d) rule and the State, in turn, has activated the three counties and municipalities who are

coming up through the multispecies planning process.

The extraordinary importance of that kind of process I think is that habitat conservation on a landscape scale is inevitably, as several of the statements have suggested, going to get into this issue of land use. It does of necessity and land use in this country is traditionally and correctly a function primarily as the initiating forces of local government. The structure of this California process has enabled us to draw in those local governments who in turn have the power to use some really extraordinary incentives such as the transfer of density zoning to create enhanced development rights in exchange for open space. There is a lot of planning going on with respect to land exchanges which, quite properly, ought to be a part of this. To the extent that you can put the burden of habitat conservation on public landowners through land exchange, it's appropriate and ought to be encouraged.

Those local governments have a great deal of ability to plan mitigation to allow development to go forward in exchange for mitiga-

tion fees which then go to habitat acquisition, almost in the nature of an infrastructure development charge in connection with development.

To summarize California, the lesson I think is this. Intergovernmental process which should yield much more flexibility and much more strength and ability to work out these incentive issues is the

local issue.

The third one that I would briefly summarize for you is a Memorandum of Understanding signed last week among the Governors of Colorado, Nebraska, Wyoming and the Department of the Interior. We came into this particular issue as a result of a complex problem at Kingsley Dam in central Nebraska in which we are being driven toward operating criteria on the Platte River to protect the whooping crane, the sandhill crane, a whole extraordinary complex of migratory birds that come to rest in the Platt River Valley twice a year as they migrate back and forth from the Gulf of Mexico to Alaska.

We learned very quickly there that when we're dealing with water issues, they can't be dealt with in isolation and that ultimately, our ability to deal with a recovery plan there means that we must build a hydrologic model of the entire Platt River, from its headwaters in the Rocky Mountains clear down to the Missouri River so that we can model the exact result of saving an acrefoot of water at Ft. Collins in Colorado in terms of its impact 500 miles down the river in the crane nesting habitat in central Nebraska.

down the river in the crane nesting habitat in central Nebraska.

That is an experience I think will be paralleled inevitably in the Pacific Northwest with the salmon and I think there are lessons to be learned in terms of the multistate issues which tend very much

to be water and fish interstate issues.

The fourth example that I would commend to your attention is the issue of working out relationships with the private sector for the administration of the Endangered Species Act on private land. About a year ago, we had a visit from the President of the Georgia Pacific Corporation with an interesting proposition. He said, we've been watching the underfolding and unscrambling of that train wreck in the Pacific Northwest and we would like to avoid that in the timber industry in the southeastern part of this country. It turns out that Georgia Pacific administers some 6 million acres of land in the Carolinas, Georgia, Alabama and the southeast. It is prime, timber land and their equivalent of the spotted owl of the northwest is a bird called the red-cockaded woodpecker and a lot of similarity. Old growth turns out to be key component of nesting habitat and foraging habitat of this bird.

At any rate, by the time it was over, we were able to enter into a 4(d) rule with Georgia Pacific which enabled us, in lieu of this complex, bureaucratic planning process, in effect, to use the flexibility of the Act to say to Georgia Pacific, we agree that your management plan for these 6 million acres of timber is a reasonable way of conserving the habitat necessary for survival of this bird, thereby keeping us out of all of the mandatory Federal machinery

of the Endangered Species Act.

In summary, I'd like to just say a word about the policy directives that were announced yesterday by the Department of the Interior and the Department of Commerce. The policy directives that

we announced vesterday were an attempt to see if we can begin the process of crystallizing some of these lessons learned in the form

of internal directives.

I was asked the question at the press conference yesterday, is this in some way an attempt to anticipate, to preempt or to substitute legislation and my response was, no, of course not. It's an attempt to reduce our experience to good, written policy form and hopefully in the process to say to the Congress this is our interpretation of where we should go from our experience and to the extent that it provides you the basis for passing judgment in the form of legislation and in the form of whatever direction you choose to go, I offer that.

Very briefly, the directives incorporate lessons learned with respect to good science. The good science issue is importance. It's the logic behind the internal reorganization to give birth to the National Biological Survey. The importance of that is to find a degree of separation between the regulators and the science and give a little more credibility and objectivity to the science. I think that is a principle that is valid throughout the Federal Government and it

is in the administration of this Act.

The directives set up mandatory peer review for listing. They say that from now on, henceforth, in all cases, we will have three, independent peer reviews in the context of the listing agreement. It's an attempt in several of the directives to broaden participation— State, Federal, local and private—in the preparation of recovery

plans through section 6 of the Act.

Finally, it is a directive which says that henceforth when we list species, the Service will, simultaneous with the listing, identify those activities which are inconsistent with habitat preservation and more importantly, to identify those activities on the land which are not deemed to cause any problems, in effect, to lessen the burden that people have quite correctly perceived that flows from listing decisions.

With that, I would be happy to answer any questions or provide you with any additional material. I share this is an extraordinarily important endeavor and that we all have a major, momentous opportunity to make a significant step forward in construction and

administration of this Act.

Senator Graham. Thank you very much, Mr. Secretary.

The second participant on this initial panel is Mr. Douglas Hall who represents the other agency, the Department of Commerce, with responsibility for the administration of the Endangered Species Act. Mr. Hall is the Assistant Secretary, Oceans and Atmosphere, U.S. Department of Commerce. Mr. Hall?

#### STATEMENT OF DOUGLAS HALL, ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE, DEPARTMENT OF COMMERCE

Mr. HALL. Thank you, Mr. Chairman. I will be very brief. I have provided written testimony and will

try to summarize my testimony for the committee today.

Secretary Babbitt has been very eloquent in enunciating some principles that guide us in our duties in administering the Endangered Species Act (ESA). The Department of Commerce shares those principles and is committed to them.

The National Oceanic and Atmospheric Administration includes the National Marine Fisheries Service which has the primary responsibility for administering the Act as it relates to marine mammals and other marine species and anadromous fish species. The Department of Commerce believes that it has been a very important tool and it has been responsible for the conservation of many endangered and threatened species.

Today, we are announcing the final delisting in conjunction with the Fish and Wildlife Service of the Pacific gray whale. This is one of the true success stories of this century in terms of conservation. The number of gray whales has increased from about 11,000 in 1970 when it was listed to about 21,000 today which is pretty close to the historic high point. So we believe that we are making progress and we are committing to making this Act work better

and to continue this important work.

I think that our challenge is to try to conserve species by preventing them from being listed in the first place. We have a number of other laws, the National Environmental Policy Act, the Fish and Wildlife Coordination Act, the Magnuson Fisheries Conservation and Management Act, and the Marine Mammal Protection Act and if these Acts are used properly, we believe that we can prevent these species from being listed.

The ESA, itself, provides limited protection for species that the Agency has declared as candidates for listing. Also we review the status of species that may need protection that sometimes results in programs to protect species before they are even candidates or

proposed for listing.

We have been working very closely with the Department of the Interior to ensure that our ESA policies, guidelines and programs are consistent. This is essential for the Federal agencies who must consult with us and who also have a duty to conserve list species. It is equally important for all other groups, whether private, State or local governments to know that when their activities bring them under the authority of the Endangered Species Act, they will receive fair and consistent treatment from the Federal Government.

As Senator Baucus noted earlier, the Act has often been controversial. That is particularly true when there is substantial uncertainty about the science underlying major decisions. Part of the reforms that were announced this week formalize the process for using scientific peer reviews. The National Marine Fisheries Service has already used peer reviews on a number of occasions and we are committed to using this even more to ensure that all of our de-

cisions are based on the best available science.

Also in the reforms is an increased commitment to involve the States, tribal governments and others in Endangered Species Act activities. In the last several years, the National Marine Fisheries Service has moved to include the States in the consultation process in the Pacific Northwest with the Pacific salmon. We feel there is room to increase that involvement and we're working very hard to establish a structure that is workable and will allow us to administer the Act while making the best use of the expertise and the advice of the States in making those decisions.

Under the ESA, our responsibilities have increased substantially in the last several years because of more listings of species, numer-

ous ongoing status reviews, development of additional recovery plans, and new efforts to implement these plans. The National Marine Fisheries Services is currently responsible for 30 species that are listed as threatened or endangered. In addition, we have initiated status reviews of species that are thought to be declining in abundance or that continue to decline despite protective measures to determine whether listing under the ESA is warranted.

The Department continues to meet its responsibilities to protect and recover all listed species under its jurisdiction through development of recovery plans, designation of critical habitat and research and consultation with Federal agencies whose actions may affect

these species.

The section 7 consultation process is an essential element for the recovery of listed species. It ensures that any action authorized by the Federal agency is not likely to jeopardize the continued existence of an endangered or threatened species or destroy or adversely

modify habitat that has been designated critical.

Since 1990, we have conducted 352 formal section 7 consultations with Federal agencies, including our own Agency. Of these, only 10 resulted in a conclusion that the activity would result in jeopardy, and in all 10 of those, reasonable and prudent alternatives were identified allowing the activities to continue with modifications that would not violate the no-jeopardy mandate in the Endangered Species Act.

As the Department focuses more on the long-term goals of the Endangered Species Act and the recovery of listed species, the challenges and sometimes the obstacles become even greater. The Endangered Species Act has been in effect for over 20 years and the Department is convinced because of the increasing pressure of human activities on the marine environment, that a strong Endangered Species Act is essential to the future of the environment of this country.

Thank you for the opportunity to testify. I'd be glad to answer any questions.

Senator GRAHAM. Thank you very much, Mr. Hall.

We are going to follow the 5-minute rule on our round of questions.

Mr. Secretary and Mr. Hall, I notice that the first item in your joint agreement of yesterday was to assure that decisions were based on sound science and, as you both have commented, this is going to entail the use of independent, scientific peer review in the listing and recovery planning process. One of the concerns about the administration of the current law is the time required to make decisions and the buildup of unresolved requests for listing. How do you see this use of independent, scientific peer review panels as affecting that concern about delay in decisionmaking?

Secretary BABBITT. Senator, I don't think it should significantly add to the time periods. There obviously is a significant time period between a petition and a listing decision because it sets in motion a process of inquiry, of public involvement that is very hard to foreshorten. My own sense is that if we have a lateral requirement for peer review it doesn't have to significantly add to the linear time frame, that it can actually go out laterally and come back but

to join the process as it moves down the track.

Senator GRAHAM, Mr. Hall?

Mr. HALL. I think in the case of the National Marine Fisheries Services, we have already undertaken peer reviews contemporaneous with other activities and do not interrupt the activities that are ongoing. I think that if we plan carefully, this should not disrupt or delay the process.

Senator GRAHAM. Has that been your experience in the past in

utilizing peer review panels?

Mr. Hall. I think that we have to have some discipline in the process to make sure that we don't consider these decisions sequentially but instead, make sure that they proceed on dual tracks. There is a tendency, if you don't have the discipline, for them to occur in a sequence. In the case of Pacific salmon, we have just completed a peer review on transportation which took place at the same time that the recovery planning process was proceeding and this did not affect the schedule for the recovery plan.

Senator Graham. There seems to be general agreement that some of the objectives in implementation of the Act are early intervention, attempting to avoid the situation deteriorating to a crisis before there is some effective action taken and that the effective action should be on ecosystem approach. Those all seem like very logic and common sense principles. Why have those principles not been a consistent part of the implementation of the Act in the past?

Secretary BABBITT. Senator, I would say that there are two reasons. One is the one I alluded to at the outset this morning and that is there has been, I think, an institutional tendency to take very narrow, passive, defensive view and you don't get at these is-

sues until they are forced on you.

The second reason, and I think this requires some investigation and some work on the part of all of us, the States are very correctly the presumptive front line managers of wildlife and wildlife habitat. The Act does not give my Agency jurisdiction to show up in Florida and say, we detect signs of trouble and we propose to do the following because the jurisdiction prior to this process is on the State side. I think what it emphasizes is the need to explore and try to work out a more proactive Federal-State relationship so that we are moving on these issues but in the context of State primacy.

Again, I think there are several State experiences that can be very helpful in this. California has a bioregional planning process right now which is beginning to surface some of these issues I think in a very constructive way. There are several other States where these issues are coming forward. I think they are all tied to the continuing evolution of State Departments of Natural Resources from classic game and fish agencies toward biodiversity,

full spectrum, wildlife managers. Senator GRAHAM. Mr. Hall?

Mr. Hall. Senator, the National Marine Fisheries Service had very little jurisdiction over Pacific salmon until 1991 when there were three species listed and then after that time, there is a cascading of responsibilities to deal with a very difficult issue. So the history is fairly short. By the time the National Marine Fisheries Service assumed real authority on this issue, it had already progressed to a point where we were in a very difficult situation. I agree with Secretary Babbitt that we need to look at ways to get

involved earlier and make decisions that will cause much less economic and social disruption in these areas if we get into it much earlier in the process.

Senator Graham. Thank you, Mr. Hall.

Mr. Chairman?

Senator BAUCUS. Thank you very much, Mr. Chairman.

Mr. Secretary, you gave four examples of where you think there is progress and I think those are good examples. Those examples you gave, whether it's the Pacific salmon or the owl, or the Georgia Pacific Company or Hinkley Dam or the California Coastal Plan, are generally undertakings where there are large entities involved, big companies, States, and so forth. That is fine and good. I think that when large entities are involved, they have the resources to gather alternative plans and plan ahead.

The real problem that many of us have, however, is there are a lot of smaller companies and individuals who don't have the resources, who are unable to put together the resources to work out the large scale plan along the lines of the four examples that you gave. What can you say to those individuals—the small business person, the logger—who is trying to make ends meet, but who isn't

as large say as Georgia Pacific or the State of California?

Secretary BABBITT. Senator, I think it's a crucial question and if

I may, I'd like to give you perhaps a too extensive answer.

Senator BAUCUS. Not too extensive because the Chairman has only given me five minutes. I have a lot more questions to ask.

Secretary BABBITT. How about a 60-second answer? Senator BAUCUS. That's better.

Secretary BABBITT. The issue of the disproportionate burden on the small landowner has come up very specifically in the Pacific Northwest, down in California and in the southeast forest lands. Our approach to it has been to go back to section 4(d) where I believe there is the flexibility to construct in the context of these habitat conservation plans a separate set of procedures and indeed a separate set of criteria for small landowners. We are getting close to a 4(d) rule for small, woodlot owners in the Pacific Northwest. We're not there yet, but we're closing in on it. There has been considerable discussion of that in California. I might add that we are also very close now in the Balcones Habitat Conservation Plan in central Texas where I think we will have a draft approach out for review within the next 60 days. In each case, it's an attempt to have a streamlined procedure and to have a set of mitigation requirements which are proportional to the reality of the small landowner.

Senator BAUCUS. I appreciate that. I urge you to spend much more time on that issue to address the concerns of individual Americans and small business people. The larger outfits have the resources and they can figure out ways to take care of themselves. It's the smaller entities that I think have a tougher time in dealing with the Act.

The next question is how far do you recommend we go in State primacy? In your statement, you paid quite a bit of attention to involvement of States, the States would be much more involved and you mentioned the California cases as your best example. Mr. Hall, you suggested that the States should be more involved too.

How far do we go here? Are you willing to say that States should set up their own Endangered Species Acts and States should be given primary authority with respect to development of recovery plans, maybe even delisting? I'm just curious, when you say State primacy, what does State primacy mean? How far are you intend-

ing that to go?

Secretary BABBITT. It is my view that it is very helpful for a State to have an Endangered Species Act. I think our experience with environmental legislation, whether it's the Clean Water Act or the Clean Air Act, indicates that we should have State-Federal relationship in which the Federal Government abdicates its responsibilities under Federal law. When I say primacy, I am thinking of the classic environmental models that we see under the Clean Air and Clean Water Acts in which the Act has enough flexibility to allow the State to get into the process of administering and setting criteria always subject to the framework requirements of the Federal law. I think that is the correct model to follow.

Senator BAUCUS. So, should the State then have primacy in making official decisions whether a species should be listed or not? Is

that a State decision?

Secretary BABBITT. I think the evolving experience out in the States is that some States now do make their own listing decisions but those decisions, under current law, do not displace the Federal responsibility to make a decision under the Endangered Species Act and I think that's a correct model.

Senator BAUCUS. I see my time has expired. Just one quick ques-

tion, Mr. Chairman.

Is this concept good, sound science? I'm concerned it's becoming a buzz word. We say good, sound science, and we toss it off like that's the solution, the panacea. What do you mean by sound science and peer review by scientists? How much disagreement is there, for example, in the scientific community over whether a species is threatened or whether it's endangered. What do you think sound science means? It might be a different interpretation compared with something else you've heard so we can clear that up as best we can. What does sound science mean?

Secretary BABBITT. First of all, I think it's necessary to concede that taxonomy is not a science that is equivalent to the laws of thermodynamics, for example. A biological science in the process of classification involves a measure, inevitably, of judgment. The question is, how are scientific judgments best made? I would lay

out three criteria.

First of all, at the initiating end, we must have good scientists. Secondly, as I indicated earlier, although I concede there is some debate about this, my feeling is that in regulatory processes, which this surely is, it is helpful and important to have a degree of separation, as much as possible, between the scientists doing the basic biological work and the people who are making the regulatory decisionmaking. As I indicated, that underlies much of the reorganization effort in the Department. Third is the classic concept of peer review. I think it's absolutely indispensable, an essential part of the phrase good science. It is what has made American science what it is in every field of scientific endeavor and I think that is an appropriate subject for legislation.

Senator BAUCUS. Thank you. My time has expired.

Senator GRAHAM. Thank you, Mr. Chairman.

Senator Chafee?

Senator CHAFEE. Mr. Chairman, I just wanted to note that in the Secretary's testimony, he has the following statistics that I find

rather startling and reassuring.

The Secretary says that there have been in the past 20 years, 118,000 consultations; that's a lot of consultations. From these 118,000 consultations, only 33 projects were stopped. In other words, the point he is making—perhaps you could amplify a little bit on this, Mr. Secretary—the point you're making is that the Act is working through the consultation process. Once in a while, yes, you come to a meeting of the removable object and the irresistible force and something can't go forward. Could you just amplify a little bit on the background of those statistics?

Secretary Babbitt. Senator, I think the real message in those statistics is that a consultation works because what normally happens in a section 7 consultation is a discussion of the objectives of the project and the habitat and species questions. There are large number of these consultations where modifications are made after virtually no expense or inconvenience precisely because the law requires that discussion take place. I think that's the real message of the only 33 projects. I would bet that there are 33 projects stopped and probably 3,000 or maybe even 30,000 in which the proposed Federal action has in some way been improved to the benefit of both parties.

Senator Chafee. It's been my experience, Mr. Chairman, in watching this procedure which we all admit isn't perfect, that there are different ways of skinning the cat here and the projects that the proponents seek can be worked out with mitigation or some other approach and both sides can go away relatively happy. So I think there is a lot in this Act that is good, Mr. Chairman, and I look forward to working with and hearing Senator McClure and others with the suggestions of what we might do to take care of

some of the problems that we are facing.

Also, I want to commend the National Marine Fisheries for the news about the delisting of the gray whale. That is a significant achievement. I read over the testimony about the bike whale and what you are attempting to do there. Of course that's up in the section of the country I come from where they have their calving up there and I hope you are as successful with that as you are with the gray whale.

Mr. HALL. I hope so too, sir. Senator CHAFEE. Thank you.

Senator GRAHAM. Thank you, Senator Chafee.

We have been asked to have a second round. I would hope that we would be able to reach the second panel shortly after 11 o'clock.

I have one question in this round. In my visit to the Pacific Northwest, one of the things I was struck with was there seemed to be some incompatibility in actions by other Federal agencies and implementation of other laws relative to the Endangered Species Act. Some of the logging practices that I saw, which I assume were at least originally sanctioned under various forestry plans or Federal agencies were cited as the major causes of the problems of en-

dangered species in many of the forests on the Olympic Peninsula. There also seemed to be practices, for instance, of the Bureau of Indian Affairs and individual Indian reservations as well as the Bureau of Public Lands and the Forest Service that appeared to be inconsistent with what practices would be necessary to protect endangered species in that area.

Do you have any comments on the relationships within the Federal family and the degree to which that can be worked out in quiet

diplomacy or is legislative action appropriate?

Secretary BABBITT. Senator, it's a complex and I think potentially fruitful topic. Technically, the Forest Plan which is now in front of Judge Dwyer is a plan written to comply with the National Forest Management Act of 1976 or whenever. The reason for that is that the National Forest Management Act and the regulations that are in effect under that Act are every bit as extensive as the Endangered Species Act. In fact, the Forest Service, in its management of western timberlands, is now operating under a law which has a close analog of the Endangered Species Act. Obviously the chances for conflict are very great.

One reason for the train wreck in the Pacific Northwest is that in fact the Forest Service and the Bureau of Land Management, operating under legislation known as the ONC Act and the Fish and Wildlife Service, wound at each other's throats in the court

with conflicting interpretations, conflicting management.

The Forest Plan that is currently before Judge Dwyer is a consensus plan built upon a sort of unitary model by all of these agencies. I think it's going to be impossible in the future to conduct these ecosystem plans and develop them unless agencies have agreement from the outset as to course of action. It is an issue, as you well know, that we have faced in Florida where the Endangered Species Act in the Everglades is not the central issue but it's pretty close, it's sitting there right on the fringes. Unless we have absolute unity of purpose and some kind of coordinating mechanism, there isn't much chance of getting results. I guess the real question is, is there any way of mandating that result or is this simply a case where you recognize it's the President's responsibility to run the Government and to have all the players on the same team, which I think has been very much the case in the past year exemplified, as Doug Hall has said, by our work together on the policy directives, the regulations, the salmon problems and a variety of other issues.

Senator GRAHAM. Mr. Hall?

Mr. Hall. I think in both the San Francisco Bay Delta area and also in the Pacific Northwest, we have made a lot of progress. I don't think we have solved all the problems that we face. This is a very tough issue. The Federal agencies have a lot of different responsibilities and sometimes those responsibilities lead to a different emphasis in different areas. We all have a responsibility to obey the law and to fulfill our responsibilities under the Endangered Species Act. I think the operating agencies and the resource agencies are working together to solve some very difficult problems. That is critical if we are going to be successful. I think we've made a lot of progress but we have some way to go.

Senator GRAHAM. Mr. Chairman?

Senator BAUCUS. Mr. Secretary, there is a lot of concern about delisting, and there is a perception that as good as the listing process is, that the delisting process is not working quite so well. For example, in our State of Montana, the grizzly bears are coming back. For a while, the Fish and Wildlife Service was contemplating cutting back the recovery plan budget, which made it even more difficult for the bear to be recovered.

What can you tell us about what the Department intends to do to address the delisting concern? How are you going to properly approach or speed up the delisting process, where it appropriately should occur?

Secretary BABBITT. Obviously we've had some successes that clearly deserve delisting. It is, in some measure, a resource problem if we are faced with allocating resources between a listing petition for a species on the brink of extinction and a delisting petition. I think it's obvious to see the tendency to deal with the emergency room case.

My own feeling is that we need to put more effort into moving the process from endangered to threatened, doing a two-step delisting process that has enormous importance because when a species is listed as endangered, we have very little flexibility in terms of the way we go about constructing all the recovery and management issues. If you can move it from endangered to threatened, then we have the flexibility of section 4(d) which enables us to kind of lift the net and watch the process kind of work.

Senator BAUCUS. I appreciate that but when you do so, it's important for the Department, to ease some of the concerns of property owners that moving to threatened does not put the same burden on them as endangered. That is, there is flexibility and they can exercise their own property rights in some positive way. I also urge you to think of more financial incentives as you move more

toward threatened than endangerment.

Mr. Hall, I have a couple of questions for you regarding the salmon. The State of Montana is quite concerned about the salmon question. Montanans feel because they are upstream, they are not the cause of the problem and the more that NMFS decides to, and the more that EPA decides to lower reservoir pools—Bay Coocanoosa or Hungry Horse—that we're bearing the brunt of the solution to a problem that upstate people do not cause. The feeling is that there should be other solutions looked at much more aggressively; Canadian flow, commercial fishing downstream, just lots of different solutions—maybe transporting some fish which I know some people think is a nutty idea but the main point is not enough attention paid to other ways to solve the problem.

It is my understanding that your Agency has scaled back on the Emergency Spill Program and the spill is to last until June 20th

which is next Monday, correct?

Mr. HALL. Yes.

Senator BAUCUS. That program will terminate on June 20th?

Mr. HALL. Yes. The Agency is considering what will happen during the summer months and a decision hasn't been made at this point.

Senator BAUCUS. According to the data I have, it is going to amount to \$1.3 million for every fish that is saved. Is that an accu-

rate figure? I hear that quite frequently.

Mr. HALL. That was included in a newsletter from the utility industry in the northwest. I think the cost of this measure is very expensive. It is not as expensive as initially estimated; it's probably about half that. Instead of being \$30 million, it's probably more like \$15 million but it's still very expensive.

It was taken at a time, Senator Baucus when we had an unanticipated and unprecedented collapse in stocks. Our models indicated that we would have 6,000 fish come back but instead it's less

than 600.

Senator BAUCUS. I sent a letter I believe to you, along with Senator Hatfield, essentially requesting that absent discovery of new science and different conclusion, that the Administration adopt the recommendations of the recovery team. I have so far not received an answer. When can we receive an answer to that letter?

Mr. HALL. I think it was addressed to the President and I believe there is an answer being prepared that will come to you, but I can tell you that the recovery team announced their findings yesterday. They held a press briefing in Seattle. They have had a draft report on the street for about the last 3 or 4 months, but now we have their final report that by the end of the year, we will have a final recovery plan. The process is that we view these as recommendations.

Clearly, unless there is scientific reason to the contrary, those

recommendations will be adopted.

Senator BAUCUS. I also requested the Administration to forward a proposal to us as to how the U.S. Treasury would assume the cost of the emergency measures. Again, there has not been a response. Can you give me some assurance as to when we will receive a response?

Mr. HALL. Senator, that issue is under consideration right now,

and not under the Department.

Senator BAUCUS. Can you work back through the system?

Mr. HALL. Yes. I'm aware that there are active discussions un-

derway right now to give every consideration to that.

Senator BAUCUS. There is also some concern that your Agency is often deferring to the Fish and Wildlife Service, that is your biologists are not in agreement. My question is, to what degree does your Agency make up its own mind and to what degree do you let Fish and Wildlife tell you what you should do?

Mr. HALL. We have tried to keep this decisionmaking process in the region. We have the professionals and the scientists working together to make decisions. The National Marine Fisheries Service

and the Fish and Wildlife Service have worked closely.

Senator BAUCUS. Who is in charge though? This gets to the question, and Senator Kempthorne addressed it, I hear about it constantly: nobody knows who is in charge. In addition to that, there is a sense that the Agency can proceed with a certain action; but check again, yes, look, proceed; but check with Fish and Wildlife Service, yes, proceed; and the action is about ready to go ahead, but now Fish and Wildlife Service has changed its mind. So it's not

only that no one knows who is in charge here, but it's on again,

off again.

Mr. Hall. When this particular case decision was made by the National Marine Fisheries Service in the region, the Fish and Wildlife Service was consulted and properly so. In the case of the reservoirs in Montana, there are a number of resident fish that are of concern and Fish and Wildlife Service has been involved in those consultations. The Fish and Wildlife Service was consulted but the ultimate decision was made by the regional office of the National Marine Fisheries Service.

Senator BAUCUS. One final question. Do you have any sense of whether the reservoirs in Montana, either directly or indirectly, are

going to lower the pools anymore than they already have?

Mr. Hall. We're facing a situation where we have 70 percent runoff in the Columbia and about 50 percent or less in the Snake, and so the regional managers are looking at all options for obtaining additional water. At this particular point, the options that are on the table out in the region do not include those reservoirs, primarily because of the concerns about resident fish.

Senator BAUCUS. Thank you very much.

Thank you very much, Mr. Chairman, for allowing additional time. It's a very important subject.

Senator GRAHAM. Thank you very much, Mr. Chairman.

Senator Kempthorne was unable to be here during our first round, so he is going to combine a first and second with 10 minutes.

Senator KEMPTHORNE. Mr. Chairman, thank you very much for

that courtesy.

Mr. Secretary, the biological opinion that was issued by NMFS regarding salmon recovery, one of the most serious concerns that was expressed in that was for additional water from Idaho and Montana to be used to flush the salmon through the dams. While the additional water is debatable as to whether or not that is the real solution, Federal agencies have assured Idaho and Montana that all additional water would be acquired on a willing seller-will-

ing buyer basis. Will you stand by those assurances also?

Secretary BABBITT. Well, first of all, I want to give Mr. Hall a crack at this since it is his opinion, but let me say with respect to the Bureau of Reclamation project, which I suspect you're looking at in Idaho, the typical issue in a Bureau of Reclamation project is one of water efficiency and whether or not it's possible to operate projects to yield water without impairing water rights obtained under State law. To the water rights vested under State law are substantially impaired, I think it's absolutely correct that we then have an obligation to pay if we propose to take those water rights.

Senator KEMPTHORNE. You say to pay if you take, I think let's underline take. Would you take that water if you don't have a will-

ing seller?

Secretary BABBITT. That would require either a contract modification or a condemnation action. One or the other, there would have to be compensation for the take of a vested right in either case.

Senator KEMPTHORNE. Then would you advocate or would you be a proponent that the condemnation route? Would you utilize that as opposed to the willing seller/willing buyer?

Secretary BABBITT. No, I don't anticipate a scenario in which

that would occur. I do not.

Senator KEMPTHORNE. So we have your assurances we can rule that out?

Secretary Babbitt. I don't see a scenario in which that occurs. Senator KEMPTHORNE. Fish and Wildlife issued a regulation to control ordinary land uses on private property. The regulation prohibited habitat modifications on private land if it would injure ESA wildlife indirectly. Then, as you know, on March 11th, the Court of Appeals invalidated the regulation saying the Federal Government has no authority under the ESA to impose land use regulations on private property. The case is often simply cited as the Sweethome decision.

In light of the Sweethome decision, what is your position on the degree to which the Federal Government can regulate land use on

private property?

Secretary BABBITT. I obviously do not agree with the Sweethome decision. There is a contrasting opinion from the 9th Circuit Court of Appeals in what is known as the Pulilla case which I believe is a better interpretation of the Endangered Species Act and the regulations issued thereunder. It's quite possible that this issue will eventually be definitively resolved, but it has not and I frankly believe the 9th Circuit opinion is a much more logical interpretation

of the Endangered Species Act.

Let me very briefly explain and give you one example of what the problem is. Down on the Balcones escarpment in Texas, we are struggling with a habitat conservation plan to protect two species of migratory birds which are in serious trouble, on the brink of extinction. Those migratory birds leave central Texas each November for Central America and there are those who say and who are now advocating, the property owners in central Texas, once the birds have left for Central America, you are free to bulldoze the land-scape there because under the Sweethome decision, there won't be any take. I think that is an illogical and regrettable possibility.

My advice has been the Sweethome decision is not the law of the land and it certainly is not the law of any circuit court with jurisdiction in Texas, but I cite that to illustrate the problem and the logic of that decision. I think it is illogical and a mistaken approach

to this issue.

Senator KEMPTHORNE. Mr. Secretary, in E Magazine, there was an article of your's that was published in its March-April issue. In that you state, "When a species is listed, there is a freeze across all of its habitat for 2 to 3 years." Can you just elaborate on what

you meant by that?

Secretary BABBITT. Senator, I'm happy to tell you that statement has been superseded by the issuance of the policy directive that Mr. Hall and I have mentioned. It has been a problem and it's the reason for the directive of yesterday in which we say we're going to end that practice and from now on, when a species is listed, we're going to issue written advice to landowners saying the following activities do not pose any threat to this species. So I believe

that statement probably was an accurate statement in many re-

spects of the practices until yesterday.

Senator KEMPTHORNE. In light of your statement that this occurred yesterday, does that mean you believe that you do not have the authority to stop logging on 72 acres of land because a pair of

spotted owls are nesting on Federal land, 1.6 miles away?

Secretary BABBITT. That leads to the question I think Senator Baucus asked and that is how do we administer this Act to avoid hardship to individual, small, woodlot owners and I can say with some confidence I think we're closing in on that issue and that we're going to have a 4(d) rule which will address this issue in the very near future.

Senator Kempthorne. Because that issue that I just referenced has resulted in a lawsuit, the U.S. v. Anderson and Middleton Logging Company Inc. Will you now be telling your attorneys to re-

verse course on this?

Secretary BABBITT. Not yet. The first thing we've got to do is

produce the rule.

Senator KEMPTHORNE. I will be back to you, Mr. Hall, in just a

minute.

Mr. Secretary, let me ask you, you saw the slides here, you saw that in those two counties, and they are representative of all of Idaho, that the timber sales have been appealed. Do you concur with me that there are many groups in the United States that would be pleased with that knowledge that all those timber sales have been appealed, which is stopping the logging?

Secretary BABBITT. I don't know.

Senator KEMPTHORNE. Does it trouble you that they have ap-

pealed?

Secretary BABBITT. Senator, these are national lands and they are owned by all of the people of the United States. I think that we need to reflect on and analyze these issues in the context of lands which belong to everyone.

Senator KEMPTHORNE. Do you think we're reaching a point that

it is no longer politically correct to harvest a tree?

Secretary BABBITT. No.

Senator KEMPTHORNE. Do you think that those of us who may sit on this panel that ask questions that sound like we're advocating harvests will be dubbed as antienviromentalists?

Secretary BABBITT. I suppose that depends on the context of the question and many other factors, but so far, if I may add my post

script, your questions seem to me to be pretty reasonable.

Senator KEMPTHORNE. Then, Mr. Secretary, can I use you as a source and would you give me a stronger quote that I can use with some of the groups that would say that because I'm trying to find the balance, that I am pro-environment?

[Laughter.]

Secretary BABBITT. This dialogue could get us both in trouble, Senator.

[Laughter.]

Senator KEMPTHORNE. I find it interesting when I look around this room, wood paneled, the wood is everything, and if we say that it's not right to have wood, and then you look at the extractive minerals that have been used, and that is not right; then we go to manmade but a lot of those use petroleum products and then there is the waste stream of hazardous material that we know nothing about, I really do think that we need to strive together. You and I may not be on the same side of the fence on all these issues, but we need to strive together to lower the rhetoric so we can get that balance because right now I don't think there is balance. Do you think there is balance in the Endangered Species Act?

Secretary BABBITT. Senator, I can say this, I have worked mightily over the last year in the context of these habitat conservation section 7 issues, whether in Florida where we have been through a knockdown, dragout fight where I think we've found balance, exemplified by the fact that the last time I was in Miami, there were equal numbers of pickets from the two opposing sides to greet me

outside of the Hyatts Regency.

Senator KEMPTHORNE. Were both groups using wooden stocks?

Secretary BABBITT. In this case, they were probably sugar cane stocks. I think there is the potential for balance in the construction of this Act. That's not to say that it can't be improved on. I would simply say to you that I believe if we work this hard, pragmatically and thoughtfully, that we can find some consensus. We're not going to close completely on all issues in that spirit, but I think we can on some.

Senator KEMPTHORNE. And I'm still looking for your endorsements.

Senator Graham. Thank you, Senator.

I have one final question which is a Florida-specific question. Our State animal is the highly-endangered Florida panther. There has been a recovery plan developed by the State agencies and under the aegis of a Panther Advisory Committee. That plan is predicated on the introduction of some Texas cougar genes in order to reverse the genetic consequences of generations of very tight inbreeding. The Endangered Species Act has been raised as a source of concern as to whether that practice will be sanctioned, that is the introduction of the outside Texas cougar.

The concern that State officials are expressing is one, they believe that this is an appropriate, maybe the only way, of saving this animal and two, are concerned that they have missed one breeding season in getting this issue resolved and that they may, if it's not

resolved soon, miss a second.

I recognize this matter is still in the review process, but what does this specific case say about the State-Federal relationships in the protection of endangered species and in the timeliness of getting a matter such as this resolved?

Secretary BABBITT. Senator, I understand it to be the position of Florida and its Governor that what we need in south Florida is a little more Texas virility to kind of get things moving in terms of

reproduction down there.

It poses an extraordinary set of unresolved issues under the Endangered Species Act that are simply not really clearly laid out in the context of the Act. There are some who would say the Act requires us to stay our hand until the species is extinct or until the God squad is called to create a section 7 exemption to allow this little mating process to take place. There are a couple of other possibilities and I think what I can say to you is that within the next

week, I believe the Fish and Wildlife Service will have a recommendation to me that they have signed off on. Mollie Beattie is here if you want to pursue this issue with her, but I believe that we clearly understand that the preference of Florida is to bring the Texans in and I'm advocating looking for a way that we can do that.

Senator GRAHAM. I might have phrased the answer a little bit differently in a few instances, but I'm pleased that we are close to a resolution on this matter.

a resolution on this matter. Senator Kempthorne?

Senator KEMPTHORNE. Mr. Chairman, thank you.

Mr. Secretary, in light of your comments about Texas virility with regard to reproduction, I might let you off the hook on that endorsement statement.

[Laughter.]

Senator KEMPTHORNE. Mr. Hall, NMFS has been engaged in a controversial spill—we've talked about this program and the eight dams on the Columbia River system. The operation to spill additional water over the dams to speed the downstream migration of endangered salmon smolts began on May 10th. It's been portrayed as an emergency response to the low number of salmon returning

this year from the ocean phase of their life cycle.

The flaw in the strategy, of course, is that higher spills increased the level of dissolved nitrogen in the water. High levels of dissolved nitrogen is fatal to salmon. This is no secret. Therefore, State standards restrict dissolved nitrogen levels to 110 percent while NMFS wanted to be allowed to increase the level to 130 percent. I'm in possession of data from the smolt monitoring program that steelheads are used for the program but biologists say that the gas bubble disease will appear equally in steelhead and salmon. The monitoring results show that by the time the smolts have traversed the dams to below Bonneville, 100 percent of those sampled show internal and external signs of gas bubble disease.

My question is this. These results are consistent with the numerous warnings given by biologists at the time NMFS made the decision to spill. Given that the spill option is not included in the Northwest Power Planning Council Strategy for salmon, the most recent NMFS biological opinion or the salmon recovery team's recommendations, by what process did NMFS consider and reject the warnings of so many credible biologists, not to mention forcing the implementation of a policy that between May and August will cost

\$73 million?

Mr. HALL. Senator, let me first talk about the cost which we think now the spill program probably will be more like \$15 million instead of the larger amount. It's much lower than was originally anticipated; some of the original estimates were substantially more

than what I think the actual cost will be.

On gas bubble disease, spill has long been part of the regime on the Columbia. We have had spill on the Snake River. This is not a new occurrence on the river. The levels of nitrogen in the water have been substantially higher than this year in past years through natural spill and through unavoidable spill. The difference is that this is a planned spill and it's done consistently over a period of time.

We have seen a very high incidence of signs of gas bubble disease internally. You're correct in that, but the external signs have been very low, only 1 or 2 or 3 percent. Regarding the internal signs, we don't really know what they mean. We don't know whether this is a natural incidence level that this number of fish will show these signs under ordinary circumstances or whether it has any real significance. We've never done internal examinations where we took fish and cut them open and looked at the inside of the fish. So there are signs of nitrogen inside of the fish. Whether that is really a health threat or not, we don't know. We're convening an international group of experts next Monday and Tuesday in Seattle to look at it to tell us what it means.

I think that this is an issue that, while we're concerned about it, we reduced the spill by one-third, really as a matter of precaution, whenever the internal signs have shown up, even though our scientists did not conclude that it was necessarily hazardous to the fish.

Senator Kempthorne. Would you concur that my statements are correct. All of these different entities, biologists, scientists, all say that this problem exists and there is the correlation, do you agree with that?

Mr. HALL. There is a problem with gas bubble disease whenever nitrogen levels get very high. Exactly how much is hazardous or how high the nitrogen levels-

Senator Kempthorne. Doesn't this spill create that?

Mr. HALL. Yes, the turbulence below the dams causes it but you have the same thing that occurs naturally when you have a turbu-lence in any river. We have planned spill and spill is part of the downstream migration in the Columbia, in the mainstem of the Columbia and has been for a number of years and it's been used successfully.

Senator Kempthorne. Are published reports true that the decision to spill had its origin in the White House, that it was determined over a weekend conference call between Mr. Will Stelle at the White House Office of Environmental Policy and David Cottingham at Interior and others?

Mr. HALL. Senator, that's simply not true and I have read those reports. The regional managers worked on this over a matter of several days. The regional Federal agencies had a conference call on a Saturday morning; they made the decision; the National Marine Fisheries Service made the final call. There was then a call made to Mr. Schmitten, who is the Director of the National Marine Fisheries Service, who then called me. I called Will Stelle and then Will Stelle did what he is supposed to do, which is try to notify members of Congress and others who would be interested in this decision and I think in doing his job, people started unfairly characterizing the decision but that was not the case.

Senator KEMPTHORNE. Mr. Chairman, my time has expired.

Thank you both, I appreciate it.

Senator GRAHAM. Thank you, Senator.

I want to express our thanks to Secretary Babbitt and to Mr. Hall. We appreciate very much your extremely helpful testimony today and we look forward to continuing to work with you and your offices as we pursue the reauthorization of the Endangered Species Act.

Our second panel, as indicated in the opening statement, consists of Dr. Edward O. Wilson, Professor of Biology and Curator in Entomology, Museum of Comparative Zoology at Harvard University; Mr. Michael Bean, Chair, Wildlife Program, Environmental Defense Fund; and former Senator James A. McClure, Vice Chairman, National Endangered Species Act Reform Coalition. We appreciate each of your participation. I would like to ask if each of you could limit your opening statement to 5 minutes, after which we will proceed to questions.

Dr. Wilson, thank you for your participation today.

### STATEMENT OF DR. EDWARD O. WILSON, PROFESSOR OF BI-OLOGY AND CURATOR IN ENTOMOLOGY, MUSEUM OF COM-PARATIVE ZOOLOGY, HARVARD UNIVERSITY

Dr. WILSON. Thank you, Senator Graham. I consider it an honor

and an opportunity to be permitted to join you this morning.

Let me note, first of all, for purposes of prospective, that every country has three forms of wealth—material, cultural and biological. The first two, material and cultural, we attend to very well. The third, the biological, has been relatively neglected. It is to the country's biological wealth, if I might put it that way, that the Endangered Species Act is directed.

The Act, in my opinion, has been a remarkable piece of legislation. It has protected nearly 900 species—I'm told as of today, 886 are listed, plants and animals, at a proportionately modest cost to the public. That figure of 886 protected is almost certainly a very considerable underestimate because when a natural ecosystem, say a forest remnant or a freshwater stream is protected to save a particular species, an umbrella is also thrown over hundreds or thou-

sands of other species.

What are these indirectly sheltered species? Our knowledge of them is very incomplete and that, in my opinion, is the nub of the scientific problem. In the case of organisms smaller than birds, fish and plants, North America is poorly studied, it may be a surprise for you to hear. The birds, fish and plants are relatively well known but the smaller organisms are very poorly explored. The 90,000 known inspect species could represent as few as half the true number out there. The fungi are largely unexplored, as well as microorganisms. A typical pinch of forest soil contains about 10 billion bacteria, for example, representing several thousands of species almost all unknown to science, almost all lacking even a scientific name. This vast nexus of life is what we protect when we save an ecosystem.

The American eagle, the whooping crane, the gray whale fasten our attention on threatened species and rightly so but the great panoply of lesser known, often completely unknown, and frequently invisible organisms, are what sustain the world, the natural environment. That is another reason why it would be wise not only to reauthorize a strong Endangered Species Act but to consider favorably those amendments that place new emphasis on entire

ecosystems.

There is no question that we are losing part of the flora and fauna of the United States, as much through ignorance as through greed. During the past 100 years, total extinction, by which I mean the destruction of the entire species, has come to at least 2.3 percent of the bird species, 2.2 of the amphibians, 1.1 of the 20,000 plant species and a rather staggering 8.6 percent of the freshwater bivalve mollusk species. America's most critically endangered system of ecosystems is, in fact, the aquatic.

I say at least those percentages because many species, especially those of smaller and rarer organisms, disappear before they become known to science. Many other species are moving steadily toward extinction. I will not include a further discussion here, but would welcome questions on how these extinction estimates are made.

Extinction, I would point out to you, is concentrated in certain hot spot ecosystems that are both endangered and home to relatively large numbers of species of plants and animals found nowhere else. Examples of the hot spots of the United States are the sand hills of central Florida, the Mediterranean-province scrub of southern California, and the Hawaiian rain forests. By investing special effort on the conservation of hot spot ecosystems right from the start, the salvage of the American fauna and flora can be made much more cost effective.

Why should we care about the depletion of the American fauna and flora? Well, one that I will leave you with, and I will be quite pleased to develop further arguments as the questioning proceeds, is of course the products that can come from them, including pharmaceuticals. We are entering an era of antibiotic resistance; some have spoken of a grim "post-antibiotic age," yet the vast majority of fungi from which most antibiotics are derived out of 1.6 million species believed to exist worldwide have yet to be examined as potential sources. The same is true of most flowering plants and billions of kinds of insects.

I would also mention that the ecosystem services contributed to us by biodiversity recent research has shown that with each species removed, the ecosystem becomes less productive, and less stable.

If I might have one minute longer, Mr. Chairman, I'd like to close by saying, furthermore, look to the human mind. In ways that only researchers understand, people benefit psychologically—and dare I say spiritually—from the existence of natural ecosystems enriched biodiversity. Granted, by today's ethic, the value of our fauna and flora may seem limited and well beneath present concerns of daily life, but I suggest that as our biological knowledge grows, and it must grow rapidly, the ethic is going to change fundamentally. For reasons that have to do with the very fiber of our brain, the fauna and flora of this country will be thought part of the natural heritage as important as our art and language, and that, in my opinion, is the nub of the ethical problem. I hope that we might find ways to place greater value on biological wealth in these deliberations.

Senator GRAHAM. Thank you very much, Dr. Wilson. Mr. Bean?

## STATEMENT OF MICHAEL BEAN, CHAIR, WILDLIFE PROGRAM, ENVIRONMENTAL DEFENSE FUND

Mr. BEAN. Thank you, Mr. Chairman and members of the subcommittee. It's a pleasure and an honor to have this opportunity to talk to you in this the first of your series of hearings on the En-

dangered Species Act.

Because this is the first hearing and your interest is in having an overview of the Act and in particular, what Congress thought it was doing 20 years ago when it passed this law and what success or failure it has had, I've built my testimony around a familiar example of an endangered species, the whooping crane. It might be useful to draw your attention to the graph which appears on page two of my testimony which depicts the slow, but steady recovery of that species over the last 50 years.

It is important to point out in looking at this graph that we already had 30 years of experience trying to save this perhaps the best known of endangered species when Congress passed the Endangered Species Act. This was probably the best known endangered species; it shows up frequently in the debate in 1973. Congress was clearly aware of the small but important progress that

had been made over a 30-year effort.

In the two decades since the Act was passed, the crane has continued to grow in numbers but the number of wild cranes that winter on our Gulf coast is still only around 140. That means that this species, after 5 decades of effort, is still an endangered species and in all candor, it will remain an endangered species for several more decades.

You're going to be told, if not today, then I assure you at future hearings, that the Endangered Species Act has been a failure, and you will be told it's a failure because very few species have yet recovered and been taken off the endangered species list. What I think the whooping crane example shows and what Congress understood in 1973 is that this is not a business that produces instant gratification and overnight successes. This is a long, painstaking, difficult and hard effort to bring about a reversal in the fortunes

of species that have been reduced to the brink of extinction.

The second point that is clearly made by the example of the whooping crane is that if you don't start conservation efforts until a species has been reduced to extremely low numbers—in the case of the crane, 21 birds surviving in 1941—you are buying into a system that is going to not only take a long time but cost a lot and be fraught with a high degree of risk of failure. Unfortunately, although Congress in 1973 wanted to get more preventive to encourage action to protect species that were threatened, that is before they became in the crisis stage of endangerment, the reality is that many of the species that we are protecting under this Act are not receiving protection until they have been reduced to levels lower than the level that the whooping crane was reduced to in 1941.

Indeed, if you look at the plants of Hawaii, of which there are approximately a little more than 100 that are listed, fully half of those have been reduced to numbers lower than 21, the whooping crane's 1941 number, before they went on the list. The lesson again from the whooping crane and these other species is we have to start this process early and that takes more resources than the

Fish and Wildlife Service and the National Marine Fisheries Service have had historically. Senator Baucus, to his credit, earlier today said his bill will put the money where his mouth is and frankly, Congress has not done that these last 20 years and that

is part of the problem.

The third point about the whooping crane that it is important to point out is that there have been very few conflicts with either public projects or private landowners and that, in fact, is typical of most of the 800-plus endangered species that are on the list today. Despite the fact that there have been very few conflicts, the whooping crane itself is featured in efforts to stir up fears frankly among

property owners and others.

To illustrate that, I included on page ten of my statement a map that was produced by an organization that has been a very vocal critic of the Endangered Species Act and it was reproduced on the floor of the House during the debate of the National Biological Survey. This map purports to depict the ranges of endangered species. The clear inference from this map is that if you happen to live in one of these blackened areas on this map, you're in some peril perhaps of losing your land or your income or livelihood and so on. Probably the largest swath of black on this map is what begins on the Canadian border at the North Dakota-Montana border and continues south to the Gulf Coast in Texas. That, in fact, the migratory flyway of the whooping crane.

The whooping crane never sets foot on 99.9 percent of the land within that flyway. Yet, when the House debated the Biological Survey bill, it was said that this map depicts the impact of the Endangered Species Act on private landowners. It doesn't depict the impact of anything. What it depicts is frankly the flyway of one bird that has had very little, if any, negative impact on any of the

landowners within its range.

I will conclude with that and will be happy to answer your questions later.

Senator GRAHAM. Thank you very much, Mr. Bean.

Senator McClure?

# STATEMENT OF JAMES A. McCLURE, VICE CHAIRMAN, NATIONAL ENDANGERED SPECIES ACT REFORM COALITION

Mr. McClure. Thank you very much, Mr. Chairman. I appreciate the opportunity to be here today and I want to commend you and the committee for undertaking this series of hearings leading

to a reauthorization of the Endangered Species Act.

As you indicated in the introduction, I do represent the National Endangered Species Act Reform Coalition. I serve as its Vice Chairman. I should note for the record as well that the Chairman of that group is former Secretary of Agriculture, former Congressman from Minnesota, Bob Bergland. I am here on behalf of that group which represents upward of 150 individuals and organizations. Many of the organizations that are members of the Coalition have thousands, if not millions, of members and therefore, we represent directly or indirectly several million Americans who have concerns about the Endangered Species Act.

First, let me say two things. One is that I am here today to talk about the background of the Act, its history and its evolution. I'm

not here to talk about any specific examples of changes that we believe ought to be made in the Act or specific legislation. I hope to

have the opportunity to do that later on in other hearings.

Secondly, I am here to lay down a marker at the beginning. We are not here advocating the repeal of the Endangered Species Act. We are advocating reform of the Act to make it more workable, more sure, more useful, more economical, and more democratic in its application.

I sat on your side of the table when this Act was passed in this body in 1973. I was there again in 1978 when the Committee debated amendments to the Act. These are perhaps the two key landmarks in this legislation. I know something about the conversations that we had around that table and in this room at that time.

One of the questions that was asked repeatedly is exactly where do we stop the limitation of this Act? The Senate Act was not as inflexible as it ultimately became after conference with the House because there was the recognition that it could not be and should not be absolutely inflexible in its application. That flexibility was largely dropped in the conference with the other body so the bill that was passed has in it elements of absolutism that sometimes cause some problems and that lead us to the point of seeking some changes in the Act today. That was not unforeseen nor unforeseeable.

Those discussions took place. I remember both in 1973 and 1978 when we were dealing with the Act, the conversation kind of went like this: what happens if; well, I don't know what happens if; well, what should happen if; well, I don't know what should happen if; but let's go ahead and do it anyhow and we'll work that out later. That was not blind and it wasn't totally irrational. It was because you could not anticipate exactly what was going to happen when implementation of this Act began. Nor could we foresee exactly what the conflicts might be with other laws or with State actions.

We did know that would occur, and we did believe that as history unfolded, as we got experience under the Act, it would become more clear what the scope of that problem is, was and would be and what perhaps we could do to deal with it. A common thread that you will find throughout my testimony is that there was uncertainty as to what the limitations of application should be and an

expectation that this Act would be revisted.

Î suppose we could add to the history of this Act the interpretation by the Supreme Court in TVA v. Hill. There have been many who say the Supreme Court was simply blind and unthinking. I wouldn't say that. I would say that the Court did not have to come out with the decision they made in TVA v. Hill. The Court did not have to decide that Congress had intended that this Act have primacy over every other political, social and economic objective because that was not necessarily what Congress said.

I can't condemn the Court for arriving at that conclusion because there was enough ambiguity in the Act that allowed the Court to make that interpretation. In practice, as well as in precedent, this Act has been more inflexible perhaps than many of the sponsors and those who voted for it believed that it would be when it was adopted in the first place. I'd like to take the time, if I may, Mr.

Chairman, to read just a little bit of a couple of statements by members of the Congress at that time.

Senator McGovern said in a statement on the Senate floor on

July 18, 1978:

I do not think it was the intent of Congress that in passing the Endangered Species Act in 1973 that we wanted no development to take place in the Mississippi and Central Flyways encompassing the entire Missouri River Basin because the whooping crane is annually sighted in the area. We did not intend to prevent development in the northwest because it is the range of the grizzly bear. We did not intend to make prairie dog towns inviolate because a black-footed ferret would make a prairie dog town its home.

Yet, every time a project is proposed which admittedly could affect these endangered species, an extreme case is made and litigation threatened on the assumption the whooping crane will have no room to land, the grizzly bear no room to roam, and the black-footed ferret no place to call home. The intent of environmental law is that these species and their habitats be taken into account and that regionally, the cumulative impact on them be taken into account if a large area is their habitat

and that their critical habitat not be ruined if it is site-specific.

If that is a requirement of the law and it has been met, then that should be the end of it, but too often it is not. We can reaffirm our commitment to clean air, clean water and protection of endangered species, yet at the same time, affirm that we are not advocating no growth because of these concerns. Rather, we are committed to the best possible environment in which man and animal can coexist while providing for the needs of man.

There is a much shorter quotation from Senator Robert Byrd, who on the next day in a statement on the floor, said, "The need to protect our environment must be balanced against our require-

ments for energy, transportation and economic development."

Mr. Chairman, I know my time has expired. I am sorry that it has because I would like to and I hope to at some future time, get into more detail. Let me conclude by saying I don't think you can do this on a case-by-case approach. If I understand Secretary Babbitt in his public statements and in his statement here today, he said, we'll work out cooperative agreements and he pointed to four cases. Mr. Chairman, there aren't four cases. That is a book of horror stories; a book detailing the application of the Act and its affect on individuals across this country. Each page is one case. By saying that I do not wish to indicate that the Act needs to be junked. It is important, however, to recognize that you can't go through this and expect the Secretary of the Interior to spend a day or two, or a week or two on every one of the pages in this book and say, we'll solve that problem by cooperative agreement. That simply won't work.

What we're seeking is a change in the process by which decisions are made so that you don't have a book of horror stories like this.

Thank you, Mr. Chairman.

Senator Graham. Thank you very much, Senator.

Dr. Wilson, in describing the benefits of biodiversity, you raised the issue of the future of scientific uses, particularly in health areas. I was struck that within the last few days there has been some national attention to the point that you were making and that is that some of our antibiotics seem to be losing their potency.

Could you elaborate on what you see from the scientific application, the values of the maintenance of biodiversity, maybe benefits

to this and future generations of mankind?

Dr. WILSON. The world of biodiversity which, as I emphasized, is probably less than 10 percent known, is a potential cornucopia of new scientific and medical discoveries. We haven't begun to tap

that potential, only a minute fraction of the flowering plants, for example, and only a smaller fraction of the fungi have been exam-

ined with reference to antibiotic and anticancer activity.

Yet, experience and first principles tell us that because species are natural chemists and have had millions of years of natural selection of trial and error to develop defense against their enemies, including bacteria, fungi and runaway cell growth, that they are the logical place to look for alternative drugs for therapy and prevention of the most important human diseases.

I think one of the great benefits from having a National Biological Survey and of placing greater value on the natural ecosystems and their maintenance is to learn to make use of that cornucopia

and to keep ahead of the race against disease pathogens.

Senator GRAHAM. Senator McClure, I'd be interested in your assessment of what you would list as the primary shortfalls or problems or defects in the current Act and administration of the Endangered Species Act?

Mr. McClure. First of all, even though the law does include in it today the opportunity to inject some economic balance in the designation of critical habitat, that is something that does not figure

very largely in the deliberation process.

I don't think it's fair for us to say that there have been 818,000 consultations and only 34 collisions when you can look at thousands of cases where an individual property owner in this country, confronted with the possibility of the designation of an endangered species on his lands, has been forced to make uneconomic choices

at his expense.

For example, let me describe a farmer who owns 160 acres of land who wants to use that land. The Fish and Wildlife Services says he can't do it. Later, it is said that he voluntarily gave 60 acres to the Government. He didn't voluntarily give 60 acres to the Government. That land was extorted from him. There are dozens of examples like that where there needs to be some protection for individual property rights and the rights of small individuals who cannot protect themselves against the operation of the Act.

Some comment has been made here about the need for better science. I certainly agree that is true. I'm delighted to hear that the Administration is going to move towards peer review because there have been five recent cases about the Endangered Species Act in which the courts have thrown out the designations because of bad science. I think examples of that are rife throughout this. There is bad science being applied. That is partly because, and I think quite legitimately, they don't have the financial capacity to acquire the resources to ensure better science.

We need a better process in which the interests who are affected have the right to be heard in the designation of a species, in the designation of critical habitat, and in the development and application of recovery plans. What we have found in experience is that courts have said to various groups, "I'm sorry but you don't have

standing."

For example, the small communities of Boundary County and communities in northern Idaho and western Montana have been affected by the actions taken by the Forest Service on timber harvest in the National Forest because of the grizzly bear habitat. The counties and the communities affected sought to bring suit to protect their rights to have an economic base of activity in their area. The court said, I'm sorry, you don't have standing. Somebody representing the public interest from say the State of Florida would have had standing to sue over that issue in Idaho and Montana but the counties, the communities and the economic interests, the court said, had no standing. That needs to be fixed.

Those are the things I would look at. Primarily, the process by which decisions are made and the need to include the opportunity

for some balance.

Senator GRAHAM. Mr. Bean and Dr. Wilson, I'd be interested in

your comment on the listing of defects in the current law?

Mr. BEAN. Well, I think the principal thing that is needed frankly is to add some incentives for conservation. I think Senator Baucus, in his opening remarks, referred to the abundance of sticks and the lack of carrots in the Act. Frankly, I think both the supporters of the Act and the critics of the Act agree, at least in principle, that incentives are a good idea. The key questions are what is the nature of those incentives and how much do they cost and how do we provide them.

As you all well know, we have existing programs in the agricultural context that create incentives for farmers to take erodible cropland out of crop production, that create incentives for farmers to restore wetlands on their land, that create incentives for private woodland owners to manage those woodlands in a scientific way, but we have nothing comparable that rewards or creates incentives for private landowners to manage their lands in ways that would produce endangered species conservation benefits. For that matter, in all the programs that I just described, we have missed the opportunity to date to use those programs to achieve their originally intended purposes, while simultaneously maximizing the potential endangered species benefits that can accrue from the Conservation Reserve Program and the Wetlands Reserve Program, and so forth.

So I think a very key issue for this subcommittee and its parent committee to deal with over the course of the next several months is figuring out a way to provide the sorts of incentives that are going to lessen the conflicts with private landowners. Senator McClure has referred to his book of horror stories. I'm prepared to concede that there have been some problems. Whether his book is a work of fiction or a work of nonfiction, I won't know until I see what is inside its covers but clearly there is a need to address this problem of private landowners and others and I think the best way

to do that is through creating some incentives.

Senator GRAHAM. Dr. Wilson?

Dr. WILSON. Well, clearly the more scientific information we have available that is replicable, testable and utilizable by peer groups of specialists, the sooner we're going to be able to resolve conflicts. I would again make note of the fact that the United States is still largely biologically unexplored. I rather hoped that in a collateral effort by the Senate the National Biological Survey is muscled up and allowed to move forward to provide that kind of information.

New technologies are developing. For example, computer-aided geographic information systems provide overlay of species distributions with information as it piles up about individual species, their

status, their management, their uses and so on. Further overlays are added for population, economic use, management, plan of the area and so on. With this information, if adequate, I think we can avoid most future horror stories.

Senator GRAHAM. Thank you.

Senator Baucus?

Senator BAUCUS. Thank you, Mr. Chairman.

Dr. Wilson, you made a very compelling case of the problems facing the people on the planet. In your book, you talk about the five or six prior incidents in geologic time which dramatically reduced the species on this planet. Your point is that this is the next one; this is the only one, however, that is manmade, and it is on a whole different magnitude. I think you make a compelling case.

You've testified to the accelerated number of species that are becoming extinct and I'm sorry I missed your testimony but I understand you even suggested that fungi might be a source of addressing some of the diseases becoming more rampant on this planet and therefore suggest that we should conserve as many fungi as we

possibly can to help solve that problem.

The question I want to ask you and I can ask Mr. McClure basically the same question, what have you heard from the other side that you think is most legitimate? What are some of the most legitimate concerns you've heard from those who would say the Act goes too far? Do you have any suggestions as to how to address

those legitimate concerns?

Dr. WILSON. First of all, environmental study and analysis perhaps because they are still in a relatively early stage, find few dissenters to the generalizations that I have made. Three separate modes of analysis independently pursued by investigators, more than 100 studies, have led to the same global extinction rate estimate within the nearest order of magnitude, that is within the nearest factor of 10 that is not as good as the best of particle physics, as I believe Secretary Babbitt may have mentioned, but is nonetheless compelling because the paleontologic record indicates that the extinction rates are between 1,000, three orders of magnitude and 10,000, four orders of magnitude, greater than they were before humanity came along. In other words, it's quite remarkable that three separate lines of analysis have arrived at roughly the same estimates. I just wanted to make that point in case the subject came up.

As to how just one scientist might view the question of improving the Act, I don't feel that I'm quite prepared to untangle in my own mind—maybe I'm not alone in this room—all of the political and economic complexities contingent in a future revision, but I would like to suggest that as we learn more, as we begin to map where these organisms are, as we begin to understand what causes extinction, then we will be able to see what we can do or what we cannot do in each part of the country, each State, each county, and in smaller units without damaging species and the local populations. This is the information we need then to make the political

decisions. It should not be made by the scientists.

Senator BAUCUS. As I understand it, you're saying perhaps more resources are needed to get a more comprehensive understanding

of the problems which might lead to results that are less conflicting

or less adversarial. Is that basically what you are saying?

Dr. WILSON. Yes, basically. In other words, in order to know what an ecosystem is, where the dangers to ecosystems are quite precisely and the species in them, we need that kind of investigation and consultation, and I do believe that is within our capacity during say the next 10 or 20 years if the scientific enterprise is built up in biology.

Senator BAUCUS. Senator McClure, I think you outlined very well some of the concerns a lot of people have. How about the other side? What Dr. Wilson said, or others who are very strong advocates of the Act said, that you think are most legitimate examples and do you generally agree with the conclusions—I'm sure you haven't had time to see them—those of not only Dr. Wilson but the other efforts Dr. Wilson referred to where basically all agree upon the rates of extinction to the same order of magnitude. Do you think that is valid and if it is a valid concern, what do we do about all that?

Mr. McClure. Mr. Chairman, I thank you for the question and the opportunity to comment because I want it clearly understood that neither I nor the Coalition believe that the Act has done no good. We think it has. I'm not one of those who say it's no good, and it's never accomplished anything. Our Coalition freely admits that it has accomplished something and constructively so.

I would caution perhaps that we shouldn't overstate what it has accomplished because there are some good things that have happened in spite of the Act and not because of the Act. Perhaps the bald eagle is a good example of it. I suspect that the bald eagle recovery is more attributable to the banning of DDT than it is to the

establishment of the Endangered Species Act.

Having said that, the Act does a great deal of good and we want to see the Act preserved so that it can continue to do good. There is reason for us to be concerned about human activity on natural systems, and to the extent we can understand what that impact and the interrelationship is, we should be conscious of what we are doing. We should avoid unnecessary damage to the ecosystem where we can tailor our actions in a way which will allow us to accomplish other objectives of society. When I talk about balance, I'm only talking about how we decide that one action in our economic, political, or social sphere is a justified action when it has an unnecessary impact on an endangered species and, therefore, we ought to modify the proposed action.

Senator BAUCUS. What about additional resources? Mr. Bean talked about more carrots than we now have and I suggested in my opening statement we need a few more positive incentives but that means give me more resources probably. I'm just curious whether you and your organization support more resources, more budget authority, more outlays of appropriations for the kinds of incentives that we're talking about to try to resolve some of this conflict.

Mr. McClure. Let me pose a question where there is a possible incentive that can yield some good results and yet is very hard to apply and that's prior consultation. How do we go about acquiring information and consulting when a landowner looking at the Fish and Wildlife Service says stay off my land, you might find some-

thing and if you do find something, you'll render my land worthess. We ought to be able to construct a way in which that landowner can consult with Federal or State agencies about their impact upon the environment without inviting an overreaction that is

to them a very draconian action.

There are some actions we can take that don't cost much money as well as those that do cost money. I think when it comes to the question of how much money can the Congress provide, I'm very aware of the budgetary problems you face up here every day and I don't have an answer for you as to exactly how you fit this into a national budget. I do believe, however, that we should explore together those actions which can be taken which cost less money and secondly, to try to rank—perhaps that's too mechanistic an approach—try to concentrate our efforts where they will have the greatest reward at the lowest cost instead of rather willy-nilly. sometimes it seems almost willy-nilly, that we apply all the resources of the Federal Government to something that is a very small problem indeed and has very little opportunity for gain.

I could recite instances in which an individual has suggested the listing of a species that inhibited private activity but absorbed a great deal of Federal time and money for a period of time before they found that suggestion was baseless. There are some ways in which we can improve that process to avoid those kinds of wasteful

expenditures.

Senator BAUCUS. It's a very complicated problem. In fact, I can think of no other environmental problems as complicated and as difficult because, on the one hand, potentially this is an environmental statute which is addressing a problem which is very different from toxic air, water or waste cleanup. In those cases, there is a very direct correlation—somebody pollutes is the problem and it has to be addressed. This case is very different. In this case, there is a minute action that somebody takes which has the effect of decreasing the extension of the species. The consequences are long term, they are not immediate, yet the adverse consequences to the landowner, the private entity who has to stop an action are immediate, they are not long term.

We are faced with this very difficult question, how do we resolve many adverse consequences of rapid extinction of species on the one hand and short-term effects on the individual on the other because I don't think there are many people who disagree that the faster the species on this planet are extinguished, the more dire

the consequences for all of us.

On the other hand, I don't think many agree that there are some cases where the application of the Act has had very short-term, adverse economic effects on the individual. It is a very difficult problem to solve and I just urge us to suspend judgment for a while and not leap to conclusions here as we try to find a way to resolve these very different, long-term on the one hand and short-term on the other hand, questions.

Mr. McClure. Mr. Chairman, I said at the outset that I commend you and the Chairman of the subcommittee for convening these hearings knowing that there will be a series of hearings. There will be the time to develop some of these issues and bounce

ideas off each other about solutions.

One of the problems is the complexity you refer to. Certainly the recovery of the endangered Pacific salmon is an example. The science doesn't support any activity, any solution. The science points to some and the Federal agencies, in ordering the spill chose to apply one alternative but there was really no science which sup-

ported that alternative.

Senator BAUCUS. One final question which is very important. Senator McClure, you may know that in 1990, the EPA's Science Advisory Board issued a report entitled, "Reducing the Risk, Setting Priorities and Synergies for Environmental Protection." The report concluded that the threats to natural ecosystems have been given much lower priority than other environmental problems resulting in threats to human health even though the consequences of destroying natural ecosystems could be far greater. According to many studies I've seen, the public is more concerned about clean air, clean water and so forth and if we're thinking about risk assessment, that ecosystem function, species function should be ranked if not at the very top of risk assessment, near the top.

Mr. Mcclure. The whole area of risk assessment is something else that needs to be examined carefully and hopefully we can do a better job of risk assessment but I think part of the answer to your question—and I don't disagree with your thesis or the conclusion of that report—one of the reasons why some of these issues haven't been addressed more is because they are so complex and

so difficult to find answers.

The case of the Pacific salmon on the Columbia River system is such a case in point. Even after this period of time, and as much time and resources have been focused on it, the science does not support any specific action. The science is ambiguous and yet the agencies are being called upon to do something so that in this instance, I would like to have had the opportunity to ask Mr. Hall a question, why in choosing the spill alternative did you ignore the recommendations of the recovery team?

Senator BAUCUS. That was the question I asked. Mr. McClure. I know and he didn't answer it.

Senator BAUCUS. Right.

My time has expired. Thank you very much.

Senator Graham. Senator Chafee?

Senator CHAFEE. Thank you, Mr. Chairman.

Senator McClure, you pointed out when the Act originally passed in 1973, that it passed overwhelmingly I believe 94 to 0 in the Senate and there was some reservation and we'll straighten those out when we get to them. I did look and see about the subsequent reauthorization votes. In 1982, it passed by both Houses by a voice vote and in 1988, the reauthorization that we did, 93 to 2 and in the House, 399 to 16, so even after some examination of it—that doesn't mean we shouldn't continue to look at it—I was impressed by these very, very strong votes that took place after we'd had some experience with the Act.

I thought Mr. Bean's point on the whooping crane and the efforts we've made there and the dog of determination it takes to revive the species was very telling. It just shows once you are on the downside of toward extinction of a species, to reverse it and climb up the other side to rector it is a year, year, difficult situation.

up the other side to restore it is a very, very difficult situation.

I listened to Senator McClure delineate the horror stories that he has compiled there and then I looked in your statement, Mr. Bean, and on page seven, and I'm not sure whether you're referring solely to the whooping crane situation, but you say the following, "In the past 27 years,"—again, I'm not sure whether you're referring back to the whooping crane—"no public or private project has been prevented as a result of the Endangered Species Act's requirements with respect to the whooping crane." Clearly you are talking about it there.

To continue, again I'm not sure whether this next sentence refers to the whooping crane, "No landowner has had his land taken without just compensation as a result of the Act's regulatory require-

ments." Are you referring to the whooping crane again?

Mr. BEAN. That refers both to the whooping crane and every one of the 850-plus other species that the Act now protects. No landowner to date has even filed a claim in the U.S. Court of Claims alleging that any action under the Endangered Species Act to protect any species has caused a taking of his land for which he's enti-

tled to compensation.

Senator CHAFEE. That's a pretty sweeping statement and I have no reason to dispute it, but I suppose Senator McClure would say that for the small landowner to proceed into the U.S. Court of Claims is just something out of his reach and thus, the statement that "No landowner has filed," I presume your answer would be, Senator, that doesn't mean there haven't been plenty who have been aggrieved but unable to take the big step of going into the U.S. Court of Claims.

Mr. McClure. Senator, can I give you just two examples and I'll

not go through the book.

The Off family has run a dairy farm in San Joaquin Valley for nearly half a century. In the spring of 1993, he lightly plowed a part of his farm to plant barley feed. Soon thereafter, a U.S. Marshal and employees of the Fish and Wildlife Service arrived looking for body parts of bloodnosed leopard lizards. No lizards were found but the Off family was still threatened with legal action for destroying lizard habitat. You can say they didn't take any of his property but to avoid an expensive legal fight, that family handed over 60 acres of their farm to the Federal Government without compensation.

I'll give you the case of a Vietnam veteran who returned to his home in southern Utah hoping to build a trailer park on a piece of land that he had bought. Shortly after he bought the land, and as he was starting to develop the trailer park, the Fish and Wildlife Service came and examined a pond on that piece of property and said, you have the amber snail here and that's an endangered species, you cannot use this property. They didn't say you can't de-

velop it, they said you can't use it.

He said, what am I to do? They said, I'm sorry, there is nothing you can do. They told him ultimately that his only recourse was maybe the Federal Government would buy it from him. He hasn't filed any action but lacks the resources to be able to go to court and say to his Federal Government, you took my property. There are dozens, if not hundreds, if not thousands of cases just like those two.

Mr. BEAN. Senator Chafee, can I respond to that?

Senator CHAFEE. Sure.

Mr. BEAN. First of all, since 1982, the Endangered Species Act has authorized the issuance of permits for incidental taking of endangered species in the course of development or other activities. All of these landowners that he has described and others that I'm sure if he had time he would go on to describe, have the availability of applying for an incidental taking permit under section 10.

Senator CHAFEE. Don't go too fast, I think this is important.

They have what?

Mr. Bean. They have the opportunity to apply for a permit under section 10 of the Act that authorizes the taking of endangered species, otherwise prohibited, in the course of an otherwise lawful activity, land development, lake development, what have you. The Fish and Wildlife Service, if it told any landowner that it could not use his property, the Fish and Wildlife Service apparently forgot to mention the availability of section 10—I'm not saying the Service did tell the landowner that. In the case of the amber snail, the Fish and Wildlife Service Director, Mollie Beattie, who was here this morning, replied at length to an editorial in the Wall Street Journal that singled out that example for its many erroneous and distorted statements.

To return to my remark about the failure of any landowner to file a claim in the Court of Claims, of course there are landowners for whom the step of filing such a claim is beyond their means, but there are many, many landowners, all of whom are subject to the Act's same restrictions, there are more than 850 species, the Act has been on the books for 21 years. The fact that no landowner, large or small, has ever sought to do that I think is indicative of

something important.

Furthermore, because of the availability of the permits that I've described, I think it is unlikely that there will in fact be situations

where takings without compensation will occur.

As a final footnote, I would add that there are now many public interest law firms representing private property owners, bringing taking claims against the United States. Former Secretary Watt worked for one before he was Secretary and there are now a proliferation of others, so there are free legal services available to landowners in these situations and still no claims of this character have been filed.

Senator Chaffee. I think that is a telling statement, particularly the point you made of the major. I can understand the situation that might occur that Senator McClure was referring to for the small fellow that it is just too traumatic to go before the U.S. Court of Claims but it is interesting that there have been none filed. I can only assume that you've done careful research in connection with the statements you're making here.

Mr. BEAN. My information was provided to me some months ago by the Justice Department. If there has been one since then, I'm unaware of it but that is the information the Justice Department

provided to me several months ago.

Senator Chafee. Mr. Chairman, I think these witnesses have been very constructive and we're certainly not hearing the last. I want to commend Professor Wilson who has been really the leader in calling our attention to the importance of biodiversity and the usefulness of plants in pharmaceuticals and other areas.

Thank you.

Senator GRAHAM. Senator Kempthorne?

Senator KEMPTHORNE. Thank you very much.

Mr. Bean, you made the point, and I appreciate it, of the fact that we should not wait until we're at the critical stage in the recovery of a species, we need to develop some process so we can identify that much earlier. I think too the panel referenced the concept of ecosystem management. Because of the cause and effect, right now we're ignoring, we have monosystem management. Do you believe that we can bring about the changes that all of you have advocated or suggested administratively or in fact that many of these things have to be done legislatively starting with this committee? Senator McClure, if I could start with you?

Mr. McClure. I think some of them can be done administratively although we would urge that legislation be passed which specifically provides for it. For example, regarding the peer review of scientific information, I see no reason why peer review of whatever character they wish within the Federal Government can take place if they desire to do so. We'd like to see the statute require that

there be peer review of the scientific information.

There are some other areas such as cooperative agreements. I'm not at all certain that cooperative agreements will always stand the test that the courts have said Congress intended with respect to endangered species, if, as a matter of fact, somebody alleges that the cooperative agreement doesn't give maximum protection to the endangered species.

I think there are things we can do to make certain that cooperative agreements are blessed by the statute and given standing so that they would withstand such attack. So I think the majority of the objectives which we seek would have to come through legisla-

tion.

Senator KEMPTHORNE, Mr. Bean?

Mr. BEAN. Senator, I believe that much of what needs to be accomplished can be accomplished administratively. There are some exceptions perhaps to that. I earlier referred in one of my answers to the need to build incentives into this Act. I think that should receive the attention of this committee with a view to crafting some new amendment that will provide for those and fund those.

As you well know, legislative action includes appropriations and I think very little of what any of us is seeking to improve this Act can be accomplished without significantly greater appropriations than have funded the Fish and Wildlife Service and the National

Marine Fisheries Service's efforts to date.

In terms of the sorts of changes that would result in a more effective administration of the Act, I think much of that can in fact be accomplished administratively.

Senator KEMPTHORNE. Dr. Wilson?

Dr. WILSON. I defer and pass on that one.

Senator KEMPTHORNE. I'm sorry?

Dr. WILSON. I say I defer to my colleagues on that one.

Senator KEMPTHORNE. Is the term ecosystem management included in the current Endangered Species Act; is ecosystem man-

agement defined?

Mr. Bean. No, it's not. I believe the only place it refers to ecosystems is in its statement of purposes where it says the Act's purpose is to provide a program for the conservation of species and the ecosystems upon which they depend. The term "ecosystem management" has been embraced by all sorts of people who clearly have a different thing in mind. I think there is a great need for clarification of what it means.

I think it is quite clear that in the context of recovering endangered species, at a minimum what it means is that we should seek to use those strategies to recover species that recreate or mimic natural or nearly natural ecological processes and relationships as opposed to putting all of our eggs into the high tech basket of captive rearing, barging salmon around dams, and the other sorts of solutions that may temporarily address the needs of a particular species but do nothing to slow the decline of the larger ecosystem and which will result in other species in that same ecosystem eventually being added to the endangered species list.

Senator KEMPTHORNE. Therefore, would that application have to

be done legislatively?

Mr. Bean. No, that does not. Clearly, Congress could, if it chose, give some guidance or give some strong urging to proceed in that way but that does not need legislative change. The Interior Department could make it quite clear that its recovery strategies are going to emphasize the reliance upon restoration or mimicking of natural ecological processes and relationships. The policies do not clearly do that at present and the Service is under constant pressure from affected interests to solve endangered species problems by essentially growing them in zoos but that won't work well for most species and it will do nothing to prevent other species that occupy the same habitats or the same ecosystems from later joining the first species on the endangered species list.

Senator KEMPTHORNE. Dr. Wilson, it is an honor to meet you with all that you've accomplished. When this was first envisioned back in 1973 and passed, did you ever think that it would get to the point it is today where you have various Federal agencies that none of which will claim they are the lead agency or that there is disagreement among them and that part of the reason is the concern among those individual, Federal agencies that if they get too far out front on say the section 7 consultation process, another Federal agency might sue them and so we've reached the point that the Government that is serving us in too many instances is experiencing some paralysis and we, the taxpayer, would end up paying

both prosecution and defense?

Dr. WILSON. Are you sure I'm the right person to ask that question?

[Laughter.]

Senator Kempthorne. Yes, because I think you and I connect.

Dr. WILSON. I've had enough trouble and enough exhausting hours trying to figure out some of the scientific issues. That was my concern in the 1970s when I believe I did testify. I think that those of us who study biodiversity recognize that if the government

continues indefinitely on a species-by-species, case-by-case, basis we will approach gridlock because there are vast numbers, hundreds of thousands of species in the United States, some of which are quite rare and many of which are unstudied. So the need toi emphasize ecosystems, flexible management, and clearly stated law with exact definition of units, terms and processes has been evident to scientists for a long time. Exactly how that should be accomplished within the framework of the Federal bureaucracy is something that, Lord help us, we haven't tried to worry about too much.

Senator KEMPTHORNE. Dr. Wilson, the reason I did ask you the question is because I agree with you that we need to have the good, hard science that will drive this, that we need to identify that science, but it has to be combined then with the realities of how you go about this and how it's administered. So I think those from the scientific community have to understand the bureaucratic community that is trying to bring about these objectives just as that bureaucratic community needs to understand the science that we're trying to accomplish and that we don't then leave the American citizen in the lurch in between.

Dr. WILSON. There has emerged a whole new field of inquiry which I helped define in a recent article in *Science* magazine called biodiversity studies and that is interdisciplinary. It combines the study of all aspects of biodiversity, biological content of biodiversity analysis with economics, legal studies, even ethical philosophy in order to arrive at both the appropriate scientific information and wise political policy that would allow us to manage and make maximum use of our surviving ecosystems at minimum cost to society.

So there is developing within the academic community, rapidly developing, a subject of science that addresses just this kind of co-

operative effort.

I might add that since you didn't receive quite the full compliment you sought from the Secretary, I will leave you with one, namely that Idaho is one of the leading States in the country in its study of biodiversity utilizing geographic information systems. I think that is funded through the Federal Government, but with agencies in the University of Idaho system, to thoroughly map the

distribution of its biodiversity. It is a crucial first step.

As I indicated earlier, what scientists wish is to be able to produce overlap maps that can be summoned with a geographic information system to lay out eventually any part of the country, any part of a State down in relatively fine detail so that we can state with some confidence what needs to be done to save diversity. We want to know exactly where the hot spots are and what would be the consequences of taking certain steps in development which, as you correctly point out, I think are due to both our inadequacy in both the science and public policy have led to some missteps.

Senator KEMPTHORNE. I appreciate your saying that, Dr. Wilson. We Idahoans believe we have a very beautiful State, we're intent upon keeping it beautiful and also, that it will be productive so that we can derive a living and educate our children for their fu-

ture.

Dr. WILSON. May you lose not a single species.

Senator KEMPTHORNE. Mr. Chairman, I appreciate this. This is such an important issue. There probably need to be a number of

hearings so that we really can explore this but we have had a very

distinguished panel here in front of us. I appreciate that.

Senator GRAHAM. Thank you very much, Senator. I think your concluding remarks on the importance of what we have started today and Dr. Wilson's admonition of lose no more specifies are appropriate to comments upon which to conclude this first hearing on the reauthorization of the Endangered Species Act.

I wish to extend my appreciation to each for your very helpful participation. If there are any additional comments that you would like to submit for the record, we will hold it open for that. Senator McClure, if you would like to make available to the subcommittee your materials, we would be pleased to receive it. Also, for the members of the committee, if there are any questions that you would like us to submit to the witnesses today for their subsequent answers, we will do so.

Again, thank you very much. The meeting is concluded.

[Whereupon, at 12:34 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record and the bill S. 921 follow:]

### STATEMENT OF HON. BRUCE BABBITT, SECRETARY OF THE INTERIOR

Mr. Chairman, and members of the Committee, thank you for asking me to be here today.

I am pleased to discuss an environmental law that I hold dear, and that I believe most of you in this Congress and in this nation hold dear. I say that fully aware that there are many questions and concerns about the Endangered Species Act.

I am here today in my capacity as one of the two Cabinet Secretaries that Congress has charged with administering the Act. I want to tell you what I have learned after administering the Endangered Species Act for 18 months, and what Secretary Brown and I want to do differently with respect to that Act from now on. None of the items I am going to discuss today require legislation. Indeed, Congress has wisely and capably provided many tools to make the Act work better. Those tools are found in underutilized sections of the ESA, as well as in other environmental legislation like the Clean Water Act, and in other statutes like the Farm Bill.

The job of an administrator is to make the best use of the tools at his disposal to accomplish a mission. From January of 1993 to the present, I have focused much of my attention on the Endangered Species Act. I have charged most of my staff at the Department to do likewise. I have focused on the ESA because it can be the most useful tool that has ever been fashioned for the land and resource planners of this country—and not because of its law enforcement authorities. This Act is crucial to this nation's future because the underlying mission—preserving species by conserving habitat and resources—is one which can ensure a more prosperous economy and higher quality of life for all of our citizens for generations to come.

The Endangered Species Act is an extraordinary and eloquent law, and it has been a stunning success. In 20 years, the Fish and Wildlife Service has had more than 118,000 consultations with agencies about whether planned development actions were consistent with the law. Out of 118,000 consultations, only 33 projects were stopped as a result of the Endangered Species Act. Since 1972, about 890 plant and animal species in the United States have been listed as endangered or threatened. Forty percent of these plant and animal populations have actually been increased or stabilized.

The Endangered Species Act has been responsible for improving populations of declining species throughout the United States and has been the focus of international conservation efforts. American alligators and the Palau Dove no longer need the Act's protection and have been removed from the list of threatened and endangered

species. We will be removing the Pacific gray whale from the list of threatened and endangered species very soon. The bald eagle, peregrine falcon, grizzly bear, eastern timber wolf, whooping crane, black-footed ferret, Columbian white-tailed deer, and greenback cutthroat trout have been recovered from the brink of extinction and are approaching full recovery and delisting. California condors and red wolves have been returned to the wild and are improving dramatically.

But the problems of owls and salmon and snails and rats have consumed the lion's share of headlines, if you'll pardon the expression. We knew when we inherited this Act that we needed to work on the tough issues—we didn't dodge them.

In the past year, we have worked exhaustively with other Federal agencies and our non-federal partners. We have explored the use of special rules under section 4(d), which provide flexibility to accommodate economic activities while furthering the recovery of list species. We developed a special rule for the coastal California gnatcatcher, for example, that provided a lot of support for a State planning process. This planning process has brought many communities together to address the problems facing the coastal sage scrub ecosystem from a comprehensive perspective that will prevent further declines of other species that depend upon this ecosystem. At the same time, residential development in the area continues. We are in the process of developing a similar rule for the Pacific Northwest that will resolve many of the issues in that region.

We have also increased our focus on habitat conservation planning throughout the country. Permits have been issued for 28 habitat conservation plans and II amendments to existing plans. In addition, about 100 conservation plans are in some stage of development throughout the country. We are working closely with Clark County, Nevada, to develop a long-term conservation plan that will allow the City of Las Vegas to continue to grow and expand while protecting its desert environment and the Desert tortoise that depends on that environment. We are working closely with Travis County, Texas; Washington County, Utah; Brevard County, Florida; and the State of Georgia to achieve the same purpose through conservation planning.

We are also working cooperatively with business leaders and individuals who share our commitment to conduct their economic activities in an environmentally responsible manner. We have entered into three cooperative agreements with private industry to protect the red-cockaded woodpecker in the southeastern United States. These agreements, which have been signed with Georgia-Pacific Corporation, Hancock Timber Resource Group, and International Paper Company, make significant contributions toward the recovery of the woodpecker and will also benefit all of the species occurring in the longleaf pine ecosystem, which many scientists consider an endangered" ecosystem. Because of the success of these three cooperative agreements, four other companies are in the initial stages of negotiating cooperative agreements with the Administration.

These companies now have a clear understanding of where and how to proceed with their development activity while making certain their activities are in full compliance with the Endangered Species Act. They can better forecast available supplies of harvestable timber, they can plan ahead, and they can rest assured that they have made a significant contribution to the survival of the red-cockaded woodpecker.

Another example of cooperative solutions to recovery efforts can be found in Powell County, Montana, where the Departments of the Interior and Commerce are working on a project in Blackfoot Spring Creek. This project is a small but critical component of a comprehensive initiative to restore fish and wildlife habitat in the Blackfoot River Watershed. The objective of the project was to restore a 1.5-mile stretch of stream and riparian habitat on a ranch owned by Mr. Jon Krutar. Both Mr. Krutar, who is a third generation cattle rancher, and the Montana Department of Fish, Wildlife, and Parks were concerned about deteriorating water quality and declining fish populations in the stream. In 1992, Mr. Krutar was asked to consider a proposal to restore Blackfoot Spring Creek and signed a cooperative agreement shortly thereafter. A partnership between Mr. Krutar, the Departments, Montana Partners for Wildlife, Montana Department of Fish, Wildlife and Parks, Trout Unlimited, Montana Trout Foundation, and the Cinnebar Foundation funded the restoration, which would benefit such species as the bull trout (which is being consid-

ered for listing as a threatened or endangered species), westslope cutthroat trout, bald eagle, osprey, and harlequin duck.

In 1992, the restoration project began. In 1993, adult bull trout were observed in the creek for the first time in 7 years and the numbers of juvenile cutthroat and rainbow trout numbers more than doubled.

After more than a year of learning the strengths and pitfalls of previous approaches to implementing the Act, the Secretary of Commerce and I have developed six principles that will serve as a framework for our activities under the Act. Those principles are:

- 1. Prevent Endangerment—In carrying out its laws and regulations, the Federal Government should seek to prevent species from declining to the point at which they must be protected under the ESA. We must do everything we can to prevent endangerment. For more than two decades, we have understood the relationship between the health of our Nation's ecosystems and the species that live there. Based on an understanding of that relationship, the U.S. Congress has given us laws like the National Environmental Policy Act, the Clean Water Act, the Coastal Zone Management Act, the National Forest Management Act, and the Federal Land Policy and Management Act that are intended to balance the social and economic needs of our society with the need to preserve the health of the ecosystems on which we all depend.
- 2. Strengthen the Safety Net—Listing, planning and implementation of recovery plans, interagency consultations, and conservation planning must be made more effective to ensure prompt protection and recovery of endangered and threatened species
- 3. Increase Flexibility—The ESA must be carried out in a flexible manner that avoids unnecessary effects upon private property and the regulated public, and minimizes those effects that cannot be avoided, while providing effective protection and recovery of endangered and threatened species.
- 4. Reduce Delay and Uncertainty—The ESA must be carried out in an efficient, fair and predictable manner to reduce delay and uncertainty for Tribal, State and local governments, the private sector and individual citizens.
- 5. Ensure Sound Science—Federal Endangered Species Act policy must be based on the best scientific information available.
- 6. Build Stronger Partnerships—Building new partnerships and strengthening existing ones with Federal land management agencies, Tribal, State and local governments, the private sector, and individual citizens is essential to each of the five previous principles and to the conservation of species under the ESA in a fair, predictable, efficient and effective manner.

Yesterday, the Departments of the Interior and Commerce announced a package of reforms that will have an immediate and positive effect on how the ESA is implemented throughout the Nation. This package builds on these six principles. The package includes six joint policy directives from the Director of the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration's Assistant Administrator for Fisheries which will take effect immediately. These reforms will:

#### A. Ensure That ESA Decisions Are Based on Sound Science

To ensure that Endangered Species Act policy is based on the best scientific information available, the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) are issuing two joint policy directives. The first requires the use of independent peer review in the listing and recovery planning processes. The second of these directives establishes standards for scientific information used in making ESA decisions, and for review and evaluation of that information.

B. Expedite Completion of Recovery Plans and Minimize Social and Economic Impacts That May Result From Their Implementation

The joint FWS/NMFS policy directive issued on recovery planning will require that any social or economic impacts resulting from implementation of recovery plans be minimized. It will require that recovery plans for species be completed within 30 months of the date of the species' listing. This policy directive commits NMFS and

FWS to involving representatives of affected groups and providing stakeholders with an opportunity to participate in recovery plan development and implementation. It also will require that diverse areas of expertise be represented on recovery teams.

C. Provide Greater Predictability For The Public Concerning Any Effects of Species Listings on Proposed or Ongoing Activities

A joint FWS/NMFS policy directive will require the Services to identify, to the extent known at final listing, specific activities that are exempt from or that will not be affected by the section 9 prohibitions of the ESA concerning "take" of listed species. In addition, this directive also will require the identification of a single point of contact in a region to assist the public in determining whether a particular activity would be prohibited under the ESA. These initiatives will help educate the affected publics, as well as increase certainty regarding the effect of species listings on proposed or ongoing activities.

D. Avoid Crisis Management Through Cooperative Approaches That Focus On Groups Of Species Dependent On The Same Ecosystem

The FWS and NMFS are issuing a joint policy directive that emphasizes cooperative approaches to conservation of groups of listed and candidate species that are dependent on common ecosystems. It directs that group listing decisions should be made where possible and that recovery plans should be developed and implemented for areas where multiple listed and candidate species occur. It emphasizes the importance of integrating Federal, Tribal, State and private efforts in cooperative multi-species efforts under the ESA.

E. Increase Participation Of State Agencies In ESA Activities

A joint policy directive by the FWS and NMFS recognizes that section 6 of the ESA requires that the Departments cooperate to the maximum extent practicable with the States in carrying out the program authorized by the Act. It recognizes further that State fish and wildlife agencies

- possess primary authority and responsibility for protection and management of fish, wildlife and plants and their habitats, unless preempted by Federal authority;
- possess scientific data and expertise on the status and distribution of species; and
- are essential to achieving the goals of the ESA because of their authorities, expertise, and close working relationships with local governments and landowners.

The policy directive, therefore, requires that State expertise and information be used in pre-listing, listing, consultation, recovery, and conservation planning. It further requires that the Services encourage the participation of State agencies in the

development and implementation of recovery plans.

In addition to this immediate action, the Departments of the Interior and Commerce will convene an interagency working group to develop a package of additional administrative initiatives to improve the implementation of the Act. This working group will seek participation from all Federal agencies to identify additional administrative changes that can be made to address endangered species issues. This task force will solicit help and contributions from non-federal interests like the States, county and local governments, business interests, and private citizens.

The two Departments will also establish individual working groups that will focus on relationships with Indian Tribes, streamline the section 10 process (Habitat Conservation Planning) to make it easier for private citizens to receive "incidental take" permits, and establish directives on the use of controlled propagation of listed species. We will continue to search for additional ways to increase the participation of

State and local governments in Endangered Species Act-related activities.

Finally, we must recognize the budgetary realities that currently face our Nation and focus the limited resources of the Federal Government more effectively.

Mr. Chairman, I believe at this point that we need to continue to explore every means of improving the implementation of the Endangered Species Act through administrative changes. Applying the principles I just outlined—and building on the

experience we have gained over the past year-we have undertaken a policy initiative to implement the Endangered Species Act in a more professional, cooperative, and less confrontational manner.

These six joint policy statements for the Fish and Wildlife Service and the National Marine Fisheries Service are designed to increase flexibility in the Act's application and to provide greater certainty to businesses and private individuals. I believe these policies address some of the persistent criticisms associated with the way the Endangered Species Act has been implemented in the past.

I will add that this is still the beginning of the process for us. As we proceed, we hope to continue our dialogue with you and will seek your counsel on how we can make the Endangered Species Act the best piece of conservation legislation ever

enacted.

Thank you for the opportunity to be here today. I would be happy to address any questions you may have.

## STATEMENT OF DOUGLAS K. HALL, ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE, DEPARTMENT OF COMMERCE

Mr. Chairman and Members of the Subcommittee: I am Douglas K. Hall, Assistant Secretary for Oceans and Atmosphere, U.S. Department of Commerce (Department). I appreciate this opportunity to discuss with you the progress the Department has made regarding its program for endangered and threatened species. In my testimony, I will discuss our responsibilities under the Endangered Species Act

(ESA), and describe how we carry out these responsibilities.

The Department believes that the ESA is extremely important and necessary for the protection and conservation of species and populations that are endangered or threatened with extinction and for the conservation of the ecosystem on which these species depend. Our efforts to accomplish these goals reflect the Department's strong environmental concerns and priorities for sustainable economic development and environmental stewardship and assessment. Our actions will make us more proactive in protecting endangered and threatened species and users of other marine resources. The Department, through the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), is responsible for the listing, protection and recovery of threatened and endangered marine, estuarine and anadromous species.

The Department faces enormous challenges and responsibilities to protect and recover species, and the actions we must take to recover these species are not always

apparent.

The best way to conserve species is to prevent them from becoming threatened or endangered in the first place. Other laws—including the National Environmental Policy Act, the Fish and Wildlife Coordination Act, the Magnuson Fishery Conservation and Management Act, and the Marine Mammal Protection Act—if used properly, provide mechanisms for conserving species before they are listed. The ESA itself provides limited protection for species that the agencies have declared as "candidates" for listing. Also, NMFS reviews the status of species that it believes may need protection, and this sometimes results in programs to protect species before they are even candidates or proposed for listing. Today, however, I will describe a program made possible under the ESA when it is determined that a species cannot recover (or even survive) without the protection afforded by the ESA.

#### Cooperation with Other Agencies

I am pleased to report, as did Secretary Babbitt, that we are working closely with the Department of the Interior and other Federal land management agencies to ensure that our ESA policies, guidelines and programs are consistent. This is essential for the Federal agencies who must consult with us and who also have a duty to conserve listed species. It is equally important for all other groups, whether private or state, tribal, or local governments, to know that when their activities bring them under the authority of the ESA, they will receive fair and consistent treatment from the Federal Government.

Demonstrating our commitment to operate consistently and to include those who are affected by the ESA within the decisionmaking process, NMFS and the U.S. Fish and Wildlife Service (FWS) yesterday jointly issued the following policies:

- 1. Peer Review.—Clarifies the role of peer review in ESA-related activities undertaken by NMFS and FWS. The policy complements—but does not circumvent or supersede—the current public review process in the listing and recovery programs.
- 2. Recovery Planning and Participation.—Minimizes social and economic impacts, consistent with timely recovery of listed species. It provides a plan to expand participation by all affected parties beyond the public notice-and-comment requirement and into the recovery planning process.
- 3. Take Guidelines.—Establishes procedures when a species is listed for identifying activities that would or would not constitute a taking of the species.
- 4. Ecosystem Approach.—Clarifies how NMFS and FWS will incorporate ecosystem considerations in all ESA activities.
- 5. Information Standards.—Establishes criteria, procedures and guidelines to ensure that decisions of NMFS and FWS are based on the best scientific and commercial data available.
- 6. Participation of State Agencies in ESA Activities.—Clarifies how States participate in the ESA activities of NMFS and FWS—including prelisting, listing, consultation, recovery, and issuance of permits.

In addition, two other joint policies are being developed—one will address the controlled propagation of listed species; the other policy concerns the definition of a vertebrate population under the ESA. Also, through a joint working group, the two agencies are pursuing other initiatives for regulatory/administrative reform, such as section 7 guidelines, to ensure consistency between the two agencies in carrying out the mandates of the ESA.

#### Overview of Program

NMFS' responsibilities under the ESA have increased due to more listings of species, numerous ongoing status reviews, development of additional recovery plans and new efforts to implement these plans. NMFS is currently responsible for 30 species that are listed as threatened or endangered. The list includes sea turtles, fish, seals, sea lions, whales, dolphins, and porpoise. For a few species, we share jurisdiction with FWS. We have proposed to list the Gulf of Maine harbor porpoise and also Johnson's sea grass (east coast of Florida)—the first plant we have proposed listing. In addition, we have initiated status reviews of species that are thought to be declining in abundance, or continue to decline despite protective measures, to determine whether listing under the ESA is warranted.

The Department continues to meet its responsibilities to protect and recover all listed species under its jurisdiction through development of recovery plans, designation of critical habitat, and research and consultation with Federal agencies whose actions may affect these species. The section 7 consultation process is an essential element for the recovery of a listed species. It ensures that any action authorized by a Federal agency is not likely to jeopardize the continued existence of an endangered or threatened species or destroy or adversely modify habitat that has been designated critical.

Since 1990, we have conducted 352 formal section 7 consultations with Federal agencies, including ourselves. Of these, only 10 resulted in a conclusion that the activity would result in jeopardy. In all 10, reasonable and prudent alternatives were identified, allowing the activities to continue with modifications that would not violate the no-jeopardy mandate. Five of the jeopardy opinions concluded that the activities would jeopardize the continued existence of winterrun chinook salmon in California; three of these were related to the same activity—dredging by one irrigation district. The other 2 concerned operations of the Federal Central Valley Project and the State Water Project in California. The remaining 5 opinions concerned the impacts of dredging and commercial fishing on other listed species including sea turtles, Hawaiian monk seals and shortnose sturgeon.

NMFS also issues all permits under section 10 of the ESA that authorize research or enhancement activities and incidental take of listed species by Federal and non-Federal entities. Currently, there are 44 permits that authorize activities related to

listed salmon: 3 for shortnose sturgeon; 5 for sea turtles; and 41 for marine mammals.

Status of Marine Mammals

NMFS has increased its efforts to build and implement a recovery program for marine mammals by:

1) protecting habitat considered essential to the recovery of a species;

2) developing regional interagency implementation teams that focus on implementing those action items that are outlined in recovery plans and that are specific to a region or a particular issue within a region;

3) fostering relationships with state and Federal fishery management councils to encourage the development of fishery management plans that consider impacts to

listed species:

4) reviewing the status and threats to a species, serving as a catalyst to implement stronger protective measures than those that would be considered otherwise; and

5) developing a 3-to-5 year Recovery Plan Research and Management Initiative for listed marine mammal species that will: (a) generate a better biological understanding of the species; and (b) have the greatest probability of showing an immediate positive result towards the rate of recovery of the species.

I am pleased to report that in January 1993 the Department made a final determination that the eastern North Pacific stock of gray whale had recovered and should be removed from the List of Endangered and Threatened Wildlife. As the agency responsible for maintaining the list, Interior is officially removing the gray whale from the list tomorrow.

On June 3, NMFS announced the availability of a draft Gray Whale Research and Monitoring Plan. The ESA requires the Department to monitor the status of a species that has been delisted for at least 5 years to evaluate whether its status continues to qualify for delisting. If at any time during the 5 year period we find that the species' wellbeing is an risk, we will issue emergency protective regulations.

The northern right whale is one of the most endangered of all marine mammals. In the North Atlantic, the best available information indicates a remaining population of only 300 to 350 individuals. On June 3, NMFS designated as critical habitat the only known winter calving ground for right whales which is located in the coastal waters of the southeastern United States. Also designated was a late winter/spring feeding and nursery area for a small portion of the population in Cape CodBay, and a spring/early summer feeding and nursery area for a majority of the population in the Great South Channel. Both areas are located off the Massachusetts coastline. This critical habitat designation is consistent with recommendations made by the Right Whale Recovery Team.

To further promote the right whale's recovery, NMFS has provided biological information and advised Federal agencies of their responsibilities under the ESA. A Southeastern U.S. Right Whale Recovery Plan Implementation Team was formed last year and includes representatives from Federal, state and county agencies, private organizations, and researchers. The goal of the implementation team is to reduce to zero human-induced mortality caused by collisions between right whales and the large vessels that transit this area. This is accomplished through aerial surveys and other monitoring, combined with a program that alerts vessels to sightings in the area. The team is especially busy during the November to April period when the right whales are located on their winter calving grounds.

NMFS is also sponsoring a New England Implementation Team for the northern right whale, as well as the endangered humpback whale. This team will examine the cumulative effects on these species of the multiple discharges of waste and other matter that are being dumped into Massachusetts and Cape Cod Bays, the effects of vessel traffic on whale behavior, and the potential effects of commercial fishing on all protected species in New England.

In January 1993, NMFS listed the Gulf of Maine harbor porpoise population as threatened, due largely to the level of bycatch in the bottom gillnet fishery. NMFS requested the New England Fishery Management Council to introduce measures that would reduce harbor porpoise mortality in the gillnet fishery to acceptable lev-

els. The Council developed time-area closures that will progressively reduce total harbor porpoise bycatch in the gillnet fishery. A decision on listing will be made this summer. However, this species is also impacted by other fisheries, including those in Canada.

On the West Coast and Alaska, NMFS is concerned about the status of the Steller sea lion which is currently listed as threatened.

We initiated a new status review of this species in November 1993 to determine whether a change in classification to endangered is warranted. This concern is based on the results of an analysis conducted for Steller sea lions in Alaskan waters which concluded that there is a high probability of extinction within the foreseeable future.

NMFS has designated critical habitat for Steller sea lions which includes major rookeries and haulouts in Alaska, California and Oregon. In addition, two special aquatic foraging areas in the Bering Sea/Aleutian Islands, and a third in the western Gulf of Alaska, were designated as critical habitat.

At the time Steller sea lions were listed, NMFS implemented additional regulations under the Magnuson Fishery Conservation and Management Act to reduce the possible adverse effects of the Gulf of Alaska and Bering Sea/Aleutian Islands groundfish fisheries on Steller sea lions, their habitats, and food resources. The regulations included prohibiting groundfish trawling within 10 nautical miles of Steller sea lion rookeries. These closures were expanded in 1992 and again in 1993 to further reduce adverse effects that groundfish trawling may have on the Steller sea lions—particularly their foraging success.

NMFS is also reviewing the current status of harbor seals in Alaska—a species which, in addition to Steller sea lions, has declined precipitously throughout portions of its range in Alaska. Both the harbor seal in the western/central Gulf of Alaska and the Steller sea lion have declined by approximately 80 percent in this region in the past several decades. We consider it imperative to protect the harbor seal, and the status review may provide an indication of what is needed to promote the recovery of this species in areas of Alaska where it is declining. Our hope is to avoid the need to list under the ESA.

#### Status of Sea Turtles

NNFS' comprehensive program to recover endangered and threatened sea turtles has been expanded beyond the southeastern United States into the mid-Atlantic and the Pacific Basin. This has been necessary because sea turtles are highly migratory—traveling great distances between nesting and foraging habitat—and because of increasing evidence of incidental capture in commercial fisheries and other threats in those regions.

The status of sea turtles worldwide has not improved. NMFS and FWS are completing status reviews of listed turtles and have found that there has been little abatement in their decline since listing. For example, continued declines of the threatened olive ridley and green turtles worldwide may warrant their reclassification to endangered throughout their range. In addition, the endangered hawksbill, Kemp's ridley and leatherback turtles continue to decline in numbers. Causes of their mortality have been identified as the result of incidental take in commercial fisheries worldwide, the lack of protection of eggs and hatchlings on nesting beaches, the loss of nesting beaches to coastal development, ingestion of and entanglement in marine debris, and commercial trade in turtles and turtle parts.

I am pleased to report that we have made substantial progress in the United States to eliminate the major human cause of turtle mortality at sea by requiring the use of turtle excluder devices (TEDs) by shrimp trawlers fishing in all offshore waters from North Carolina through Texas. In December 1994, these requirements will be extended to all inshore water in that region as well. Initial acceptance of TEDs by shrimpers was highly contentious due mainly to anticipated shrimp losses. Most shrimpers now tend to accept TEDs, and loss of shrimp from properly installed and used TEDs is less than 2 percent.

We are also focusing on the impacts of other fisheries and coastal dredging on listed sea turtles. We have required the use of TEDs in the summer flounder bottom trawl fishery operating off of North Carolina and southern Virginia during the fall and winter, and we are now considering the use of TEDs in non-shrimp bottom trawl fisheries throughout the mid-Atlantic on a permanent basis.

NMFS is committed to gathering information and reducing the incidental take of turtles in longline and gill net fisheries in both the Pacific and Atlantic Oceans. This spring, NMFS hosted a workshop with industry representatives and scientists to address the impacts that swordfish and tuna longlining has on sea turtles, and to develop conservation measures that will both protect sea turtles and be adaptable to the domestic longline fishing industry.

In addition to fishery impacts on sea turtles, a 1990 biological opinion by NMFS concluded that hopper dredging conducted by the U.S. Army Corps of Engineers (Corps) in coastal bays and channels along the south Atlantic coast jeopardized the continued existence of sea turtles. NNFS restricted hopper dredging activities during the spring and summer months when turtles are most at risk. The biological opinion has led the Corps to initiate a comprehensive research effort to better understand the coastal habitat use requirements of sea turtles. The Corps has also undertaken research to try to make coastal dredging less dangerous to sea turtles.

To support the international protection of sea turtles, we have provided technical assistance to the Department of State in implementing the provisions of section 609 of Public Law 101-162. This law prohibits the importation of shrimp or shrimp products which have been harvested with commercial fishing technology that may adversely affect ESA-listed species of sea turtles. We have provided TED technology to interested governments in the wider Caribbean region and Central and South America, which the State Department has determined must comply with the terms of Public Law 101-162.

Along with Interior, the Department successfully concluded negotiations with the Japanese which brought an end in 1992 to all trade in hawksbill and olive ridley sea turtles. The negotiations were based on a cooperative investigation between the two agencies and certification of Japan under the Pelly Amendment of the Fishermen's Protective Act of 1967, for diminishing the effectiveness of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Now the Government of Cuba, also a CITES member, appears ready, with the assistance of Japan, to propose CITES approval for trade in hawksbill turtles. We will oppose any resumption of trade in this highly endangered species.

#### Status of Pacific Salmon

The listing of salmon in California and the Pacific Northwest has dramatically increased NMFS' responsibilities and challenged everyone's knowledge and capability to provide for the recovery of salmon. With the submission of the final recommendations of the Snake River Salmon Recovery Team, NMFS plans to have a draft—recovery plan available for review—by mid-September and a final plan by the end of the year. The recovery team for the Sacramento River winter-run chinook salmon expects to submit a draft recovery plan this fall.

Current protections for listed salmon continue with NMFS designating critical habitat, conducting consultations with Federal agencies and issuing permits for scientific research and enhancement. We have been impressed with the energy, devotion and talent of local, state and Federal agencies, tribes, fishing organizations, industries and environmental groups involved in the restoration of Pacific salmon.

Native anadromous Pacific salmonids have suffered a precipitous decline over the last few decades. The American Fisheries Society's original list of 214 depleted native, naturally-spawning stocks of Pacific salmon, steelhead, and sea-run cutthroat stocks from California, Idaho, Oregon, and Washington has been expanded to over 300. Habitats of these once wideranging fishes are so severely degraded that many stocks are extinct. Remaining stocks face a long list of human-induced threats. Under the ESA we have listed Sacramento River winterrun chinook salmon (endangered) and Snake River sockeye (endangered), spring/summer chinook (threatened) and fall chinook (threatened) salmon. The continued decline of these two stocks has prompted NMFS to review their status to determine if they warrant listing as endangered. We are conducting status reviews for coastal steelhead populations, mid-Columbia summer chinook salmon, coastal coho populations, and Umpqua River

sea-run cutthroat trout. All told, NMFS has either listed or has under consideration about 60 percent of the 300 considered.

For the Sacramento River winter-run chinook salmon, which warranted reclassifying from threatened to endangered this year, the primary adverse impacts are from activities related to water diversions on the Sacramento River and in the San Joaquin-San Francisco Bay/Delta. NMFS has completed long-term section 7 consultations on most of these operations, resulting in increased protection for salmon by requiring water releases during spawning periods and restricting pumping and water diversions during migrations.

Actions that affect Snake River salmon have been grouped into four areas: (1) hydropower/irrigation operations; (2) harvest; (3) habitat degradation; and (4) hatchery practices. Hydropower operations have caused a decline in salmon populations by impeding downstream and upstream passage, slowing down their migrations, and inundating areas of prime spawning habitat. Fishing, both in the United States and in Canada, directly removes adult salmon from the spawning population. Continuing pressures to harvest fewer fish further compounds the problem. Degraded spawning habitat, which can be caused by poor timber practices, livestock grazing, and industrial and agricultural effluent, accelerates the decline of salmon populations. Hatcheries can negatively impact wild salmon populations through loss of genetic diversity, increased levels of predation, competition, and broodstock collection.

The year 1994 finds us at a critical juncture for Snake River salmon. Adult returns from about 38 subpopulations of Snake River spring/summer chinook are 40 percent below their lowest previous returns. In the Columbia River basin, drought has decreased the amount of water available for salmon migration to alarming lows. The Pacific Fishery Management Council recommended (and NMFS approved in April) that non-Tribal ocean harvest be shut down entirely north of Cape Falcon, Oregon. The Department and other affected agencies increased the proportion of juvenile salmon that pass over spillways and decrease the proportion that pass through turbines or are transported by barge or truck. As part of this effort, an intensive monitoring program is in effect to assess the results on salmon. In response to monitoring results, the agencies can institute immediate modifications to the spill program as needed. For example, in response to symptoms of gas bubble trauma, spill was cut by one-third starting May 27, 1994.

With regard to operation of the Federal Columbia River Power System and related activities, such as the juvenile transport operations, NMFS has completed a biological opinion for 1994-1998. However, current litigation (Idaho Department of Fish and Game vs. National Marine Fisheries Service) has prompted NMFS to reevaluate its approach to ESA consultations for Snake River salmon. NMFS is currently making every effort to work cooperatively within the region, with all the Federal agen-

cies, and the affected states and tribes to resolve this issue expeditiously.

NMFS also consults on the effects of ocean and river fishing on listed salmon. This year, because of historically low anticipated returns of Oregon natural coho salmon, the ocean salmon harvest off Washington, Oregon, and California was severely curtailed. In addition, NMFS consults with the Federal parties to the Columbia River Fish Management Plan on all the inriver state-regulated and tribal fishing in the Columbia River Basin to determine if more protective measures are required.

NMFS consults with the U.S. Forest Service and the Bureau of Land Management on-timber harvest, grazing, mining, roadbuilding, and recreational activities on lands owned by both agencies. We have agreed to group consultations by watershed to provide a more comprehensive, ecosystem approach to consultations. For example, we are currently consulting with these two agencies on their implementation of PACFISH—a strategy for managing anadromous fish in watersheds in Eastern Oregon and Washington, Idaho, and portions of California.

Hatcheries, or artificial propagation, may have serious genetic and ecological consequences for the viability of natural salmon populations, and potential risks must be objectively assessed before considering its use. The viability of natural populations depends on their genetic and ecological diversity, and the use of artificial propagation to restore salmon abundance should not be allowed to erode this diversity. NMFS has published an interim policy on artificial propagation and Pacific

salmon under the ESA to evaluate hatchery research and enhancement permit applications and section 7 consultations for hatcheries that may affect or incidentally take listed species.

#### Sturgeon and Atlantic Salmon

On the east coast, NMFS has programs for the recovery of shortnose sturgeon and Gulf sturgeon (for which we share jurisdiction with the Fish and Wildlife Service). A draft recovery plan for Gulf sturgeon is out for review and comment, and a newly-appointed recovery team for shortnose sturgeon will complete a draft plan this year. We consult regularly with Federal agencies such as the Army Corps of Engineers and the Environmental Protection Agency concerning activities that may affect these species. NMFS and FWS are conducting a status review of Atlantic salmon to determine if it warrants listing. That review will be completed by October 1, 1994

#### Conclusion

As the Department focuses more on the long-term goal of the ESA—recovery of lasted species—the challenges (and sometimes the obstacles) become even greater. The ESA has been in effect for over 20 years and the Department is convinced, because of the increasing pressure of human activities on the marine environment, that a strong ESA continues to be essential.

Thank you for this opportunity to testify before the Subcommittee. I will be pleased to answer any questions you may have.

#### STATEMENT OF EDWARD O. WILSON, PROFESSOR, HARVARD UNIVERSITY

The Endangered Species Act, in my opinion, has been a remarkably successful piece of legislation. It has protected over 700 threatened species of plants and animals at a proportionately modest cost to the public: of 34,000 cases reviewed under the Act from 1987 to 1991, to take one recent period, steps were taken to block only 18 development projects affected In most cases, new arrangements were made without serious loss of jobs.

This figure of somewhat more than 700 species protected is almost certainly a considerable underestimate. When a natural ecosystem, say a forest remnant or freshwater stream, is protected to save a particular species, an umbrella is thrown over hundreds or thousands of other species.

What are these indirectly sheltered species? Our knowledge of them is very incomplete, and, that, in my opinion, is the nub of the problem. The breeding land birds of North America are probably completely known to science, with 650 species, and the 20,000 described species of North American flowering plants may be over 95 percent of the total in existence. The freshwater fishes, at 800 species, are less well studied; at least 10 percent of those in Alabama, the state richest in freshwater life, still lack scientific names. In the case of organisms smaller than birds, fishes, and plants, North America is much less well known. The 90,000 known insect species could represent as few as half the true number. The fungi are largely unexplored, as well as microorganisms: a typical pinch of forest soil contains about 10 billion bacteria representing several thousands of species—almost all unstudied to the present time.

This vast nexus of life is what we protect when we save an ecosystem. The American eagle and Sierra redwood fasten our attention on threatened species, and rightly so, but the great panoply of lesser known, often unknown, and frequently invisible organisms are what sustain natural environments. That is why it will be wise not only to reauthorize a strong Endangered Species Act, but to consider favorably those amendments that place new emphasis on entire ecosystems.

There isn't any question that we are losing part of the fauna and flora of the United States, as much through ignorance as through greed. During the past 100 years total extinction has come to at least 2.3 percent of the bird species, 2.2 percent of the amphibians, 1.1 percent of the 20,000 plant species, and a truly alarming 8.6 percent of the freshwater bivalve mollusk species. I say at least, because many spe-

cies, especially those of smaller rarer organisms, disappear before they become known to science.

Extinction is concentrated in certain "hot spots," ecosystems that are both endangered and home to a relatively large number of species of plants and animals found nowhere else. Examples of hot spots of the United States are the sand hills of central Florida, the Mediterranean-province scrub of southern California, the subterranean habitats of the Edwards aquifer in Texas, the old growth forests of the Pacific Northwest, the rain forests of Puerto Rico, and, perhaps most critically, the forests of Hawaii. By investing special effort on the conservation of hotspot ecosystems, the salvage of the American fauna and flora can be made much more cost-effective.

In addition to total extinction of some species is the partial extinction of a great many more, through the often drastic reduction of their geographic range, population size, and genetic diversity. Many such decimated forms are still on the roster of the national fauna and flora, yet constitute what biologists call the "living dead"

committed to early extinction unless protected more effectively.

The paleontological record shows that before the origin of humanity, species became naturally extinct at the rate of one in a million to one in ten million per year. This loss was slight enough to be replaced steadily through geological time by the evolution of new species, so an approximate balance of diversity was maintained. Humanity has increased the mortality rate by a factor of between one thousand and ten thousand, far too high for evolution to replace. Actions taken during the next thirty or so years will, if not moderated, deplete global biodiversity by as much as one fourth. Five comparable or greater cataclysms occurred during the past 450 million years, the last by a giant meteorite strike near present-day Yucatan that ended the Mesozoic Era. In each case biodiversity took ten million years or more to be restored by evolution.

But—why should we care about the world wide loss of, say, a million species? You have likely heard of the great service of pharmaceuticals that come from wild plants, animals, and microorganisms: some 40 percent of prescriptions in the United States originate from that source. With pathogens developing resistance to antibiotics now in use (some observers have already suggested the start of a grim "post-antibiotic age") the need for new classes of substances may soon be critical. The vast majority of fungi, out of some 1.6 million kinds believed to exist, have yet to be explored as potential sources. The same is true of the 250,000 species of flowering plants and millions of kinds of insects on the planet. Consider that artemisinin, from a Chinese plant, is proving effective against malaria just when the Plasmodium blood parasites are developing resistance to the conventional quinine-related drugs. Or that ants produce a medley of substances, still largely untested, effective against bacteria and fungi. A similar potential exists in new foods and biomass producers for energy among the still mostly unstudied plant and animal species.

Of at least equal importance are the ecosystem services provided by biodiversity. The soil is alive. It sustains our own life because it is composed in part and continuously enriched by countless microorganisms and tiny insects and other invertebrates, the little things that run the earth but are often dismissed as "creepy crawlies." Recent experimental studies have established that with any reduction in the number of plant and animal species, the productivity and stability of ecosystems decline. Few species are redundant in the sense that they can be eliminated without

affecting the ecosystem.

Finally, look to the human mind. In ways that researchers have only begun to understand, people benefit psychologically—and, dare I say, spiritually—from the existence of natural environments and rich biodiversity. The biosphere is the universe in which our species arose and of which it remains a part. To eradicate even a small portion of it should be thought a permanent and tragic loss. Granted that by today's ethic the value of our fauna and flora may seem limited, well beneath the present concerns of daily life. But I suggest that as biological knowledge grows the ethic will shift fundamentally so that for reasons that have to do with the very liber of the brain, the fauna and flora of this country will be thought part of the national heritage as important as our art and language, and as dear to us as that astonishing blend of achievement and force that has always defined our species.

For detailed references, see E. O. Wilson, The Diversity of Life (Belknap Press of Harvard University Press, 1992).

# STATEMENT OF MICHAEL J. BEAN ENVIRONMENTAL DEFENSE FUND

### before the

# SUBCOMMITTEE ON CLEAN WATER, FISHERIES, AND WILDLIFE of the SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

### concerning the

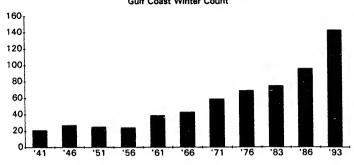
### ENDANGERED SPECIES ACT

June 15, 1994

When Congress enacted the Endangered Species Act in 1973, it automatically placed onto the endangered species list about 200 species that had been protected under earlier legislation. One of the best known of these was the whooping crane. By 1973, as Congress was aware, the United States already had more than three decades of experience trying to rescue the crane from the threat of extinction. By 1941, the total population of this bird, which once occupied a breeding range over parts of Iowa, Illinois, Minnesota, North Dakota, and Canada, had been reduced to only 21 individuals -- 15 in a flock that nested in Wood Buffalo National Park in Canada and wintered on and near Aransas National Wildlife Refuge on the Texas coast, and 6 in a Louisiana flock that would soon disappear.

Today, more than half a century later, the wild population of wintering whooping cranes on the Gulf coast has increased to about 140 birds; nearly 100

# WHOOPING CRANE POPULATION Gulf Coast Winter Count

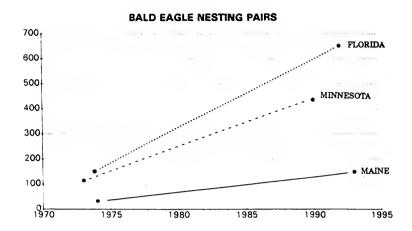


others are in captivity (see graph, above). Despite this more than ten-fold increase in its numbers in the last 53 years, the whooping crane remains today a highly endangered species. Moreover, it is likely that the whooper will remain an endangered species for most, if not all, of the next half century. The recovery of the whooping crane, and its removal from the protection of the Endangered Species Act, are feasible and attainable goals. Achieving them, however, will require a sustained conservation effort spanning most of a century.

The example of the whooping crane makes several important points relevant to current debate about the Endangered Species Act. First, many critics of the Endangered Species Act allege that it has "failed" because few species have yet recovered to the point that they can be removed from the Act's protection. By this measure, the Act's efforts on behalf of the whooping crane have also failed.

because the whooper is still on the endangered list and will surely remain there for the foreseeable future. But to label the Act a failure because it has not yet brought about the complete recovery of the whooping crane is to misunderstand rather fundamentally the challenge of species recovery. The efforts on behalf of the whooping crane have been a success, as have those on behalf of other species like the bald eagle and the piping plover in many of the states represented on this subcommittee (see graphs on next page).

Congress in 1973, familiar with the long history of painstaking efforts to recover the whooping crane inch by inch, could not reasonably have expected sudden and dramatic improvements in its fortunes. Those who today criticize the Endangered Species Act for not having produced sudden and dramatic reversals in the fortunes of species that have been pushed to the brink of extinction are simply unrealistic. Not only is recovery likely to take a very long time, but there may often be long periods in which clear progress toward recovery is not discernible. For example, during the 11 year period from 1947 through 1957, whooping crane numbers dropped from 27 to 26 birds -- a result that today's critics would surely label an abject failure. In fact, however, some of the most important steps toward the crane's eventual recovery were taken during this period. Principal among these was the discovery of the crane's breeding location in the Northwest Territories of Canada in 1954, following a nine-year search. Also, key migratory rest areas were protected by the establishment of



# PIPING PLOVER PAIRS 50, CONNECTICUT 40 MAINE 20 RHODE ISLAND 1985 1986 1987 1988 1989 1990 1991 1992 1993

Quivira National Wildlife Refuge in 1955 and Kirwin National Wildlife Refuge in 1956. These actions laid the foundation for steady growth in the population in succeeding years.

The second general point that the whooping crane example makes is that it underscores the importance of beginning conservation efforts early, before a species has been pushed literally to the brink of extinction. Both the costs and risks of waiting until a species has been reduced to extremely low levels before beginning conservation efforts are high. The smaller the remaining number of any species, and the more restricted its remaining habitat, the greater is the likelihood that it will be lost to chance events -- like the 1940 storm that killed seven of the thirteen birds in Louisiana's whooping crane flock. Postponing conservation action forecloses conservation options, prolongs recovery efforts, increases the cost of those efforts, and heightens the probability of their failure.

Congress understood the need in 1973 to begin conservation action earlier in the decline of species. It created the category of "threatened species" to enable earlier, more preventative action, before a species reached crisis levels. Despite this, however, the unfortunate fact is that many species have been allowed to decline to even lower numbers than the nadir of the whooping crane population before they were placed on the endangered list and conservation efforts for them were begun. In Hawaii, for example, more than 50 of the state's approximately

100 endangered plant species had been reduced to known populations of 21 or fewer by the time they were added to the endangered list. A published study by Dr. David Wilcove and colleagues found that during the period 1985 through 1991, fully half of the 332 plant species added to the endangered list had total known populations of fewer than 120 individuals. To wait until species decline to such extremely low levels before beginning conservation efforts virtually assures that recovery efforts will, at best, be prolonged, and, in many cases, unsuccessful.

The fact that many species are being added to the endangered list only after they have reached perilously low levels is the direct result of the inadequate resources that the U.S. Fish and Wildlife Service has been given to carry out the procedural requirements for listing species. It is important to note that the additional procedural requirements for listing that have been proposed by some (including the National Endangered Species Act Reform Coalition) would, absent significantly increased resources, only compound this problem. Many of those who naively believe (or perhaps want the public to believe naively) that recovery of endangered species ought to occur virtually overnight also apparently believe that it is possible to design a listing process that never reaches an erroneous conclusion. In fact, however, it will always be the case that some species will turn out to be more or less numerous, widespread, or threatened, than the evidence at the time of listing indicated. When that happens, as it has

occasionally happened, the Fish and Wildlife Service should and does make the appropriate modifications of its threatened and endangered list. Adding new procedural requirements may reduce slightly an already low incidence of questionable listing decisions, but it will do so only at the cost of exacerbating a demonstrably serious problem of delaying protection until species have reached critically low levels.

A third lesson that the experience of the whooping crane teaches is that serious conflicts with public and private development projects are the exception rather than the rule. The whooping crane has been legally protected as an endangered species since 1967, under federal legislation that preceded the modern Endangered Species Act. In the past 27 years, no public or private project has been prevented as a result of the Endangered Species Act's requirements with respect to the whooping crane. No landowner has had his land taken without just compensation as a result of the Act's regulatory requirements. Nor has any landowner ever made a claim in court that such a taking had occurred. In fact, no claim has yet been filed in the U.S. Court of Claims, the federal court empowered to hear takings claims, that any landowner anywhere has suffered a taking of his land as a result of any requirement of the Endangered Species Act.

Although major conflicts between species' needs and other governmental

activities have not been frequent, Congress was very clear in 1973 that in the case of such conflicts, the needs of the species were to be met. Indeed, the whooping crane was used to illustrate this point in the House debate. During the debate, Congressman Dingell brought up the need to halt Air Force bombing near the crane's Texas habitat. Mr. Dingell noted that although "[u]nder existing law, the Secretary of Defense has some discretion as to whether or not he will take the necessary action to see that this threat disappears ... once the bill is enacted, he ... would be required to take the necessary steps ... the agencies of Government can no longer plead that they can do nothing about it. They can, and they must. The law is clear."

Despite the clear command of Section 7, irreconcilable conflicts between actions review under it and species needs have been infrequent. A 1992 General Accounting Office report found that nearly 90 percent of all Section 7 consultations that it examined were disposed of informally, and of the remainder, more than 90 percent resulted in a finding of no jeopardy to the species. As the GAO itself noted, these findings were consistent with a 1987 GAO study that was limited to the Act's impact on Western water projects and that concluded that Section 7 "had little impact on western water development. Of the 3,200 consultations reviewed, none had caused a project to be terminated, and only 68 had any impact on the project." Those facts confirm what conservative columnist James J. Kilpatrick, wrote not long ago: "In practice over the past 19 years,

administrators of the Endangered Species Act have quietly exercised the kind of commonsensical judgment that most observers would like to see."

Despite these facts, even the whooping crane has been used to stir up public fears and anxieties about the Act's impact. One vocal anti-Endangered Species Act group, the National Wilderness Institute, published a map of the United States with the ranges of endangered species shaded in black (reproduced below). One of the more vast shaded portions of the map extends all the way from the Canadian border to the Texas coast some 1,500 miles away. In places, it is nearly 200 miles wide, encompassing most of North Dakota, South Dakota, and Nebraska, and significant portions of Montana, Kansas, Oklahoma, and Texas. The inference that many viewers can be expected to draw is that vast portions of the nation's highly productive farm land are threatened by the presence of endangered species. Indeed, on the floor of the House of Representatives last autumn, an enlarged version of the map was displayed during debate on the National Biological Survey and a member ominously invited his colleagues to "see the impact that we are going to have across the United States." In reality, however, the map does not depict the impact of anything. The huge shaded portion to which I refer is nothing more than the migratory flyway of the whooping crane. The crane never sets foot on 99.9 percent of this area, a fact conveniently omitted from both the map and the House debate.



Finally, the example of the whooping crane offers yet another important lesson. Most Americans have never seen one and never will. No new medicine or other product has ever been derived from the whooping crane, nor probably will any ever be. No novel insight into evolution or ecological mysteries has yet been gained by studying the whooping crane, nor probably will any ever be. If the whooping crane plays a vital ecological role in what remains of its ecosystem, we have no idea yet of what it may be and we are unlikely ever to know. If, despite more than half a century of effort to save the whooping crane, the effort fails, no one will be materially harmed and the environment, so far as we are capable of measuring it, will likely be unaffected.

And still, the battle to save this distinctive part of America's natural heritage is important. It is important not merely because the crane is a large and showy bird — to the casual viewer, a whooping crane flying overhead looks more or less like a snow goose flying overhead. It is important because it is irreplaceable. As President Nixon said upon signing the Endangered Species Act into law, "[n]othing is more priceless than the rich array of animal life with which our country has been blessed. It is a many-faceted treasure, of value to scholars, scientists, and nature lovers alike, and it forms vital part of the heritage we all share as Americans." To a great many Americans, that is reason enough to share our space with species that were here long before we came, and with a little effort on our part, will be here long after we are gone. Those Americans take seriously Edmund Burke's reminder that the citizens of any generation are but "temporary possessors and life-rentors" who "should not think it among their rights to cut off the entail, or commit waste on the inheritance" and thereby "leave to those who come after them a ruin instead of a habitation."

# STATEMENT OF HON. JAMES MCCLURE, VICE CHAIRMAN, NATIONAL ENDANGERED SPECIES ACT REFORM COALITION

### Introduction

Mr. Chairman and members of the subcommittee, I appreciate the opportunity to appear before you today as you set the stage for reauthorization of the Endangered Species Act. I come before you to share the perspective I gained as an active participant in the Senate debates regarding enactment of the original Endangered Species Act of 1973, as well as subsequent debates on reauthorization and amendments.

I commend you for taking the initiative to hold these hearings and to approach this new debate, from the outset, with a hands-on attitude. Having been involved in much of the ESA debate during my 24 years as a Senator and a Member of the House of Representatives, and in particular during my time as a member of the Senate Committee on Environment and Public Works, I think you are approaching this difficult task in the right way. I believe that it is through this type of process that the Act can be changed to enable better conservation of species, while simultaneously lessening the severity of the economic consequences to diverse interests.

As you have noted in convening this hearing, it has been more than two decades since the Endangered Species Act was enacted. Even though the number of species listed has increased—and the Act itself has been changed several times by Congress—I share your view that it would be instructive to look closely at the original enactment. For this reason, I welcome this hearing and greatly appreciate the op-

portunity to share my perspective.

Currently, I serve as vice-chairman of the National Endangered Species Act Reform Coalition. The membership of the Coalition consists of more than 150 organizations representing diverse sectors of the economy including agriculture, water districts, manufacturers, electric utilities, municipal government, small businesses and individual landowners. Some of our members are themselves coalitions or organizations representing large numbers of individuals, such as the American Farm Bureau Federation, the National Rural Electric Cooperative Association, and the National Association of Home Builders. The Coalition represents, directly or indirectly, millions of individuals who have been, or could be, adversely affected by the current implementation of the Endangered Species Act. We welcome the opportunity to participate in the early stages of this dialogue, because we believe our most effective tool is education.

Mr. Chairman, although the National endangered Species Act Reform Coalition is an advocacy group, I do not appear before the subcommittee today to advocate any particular amendment of the Endangered Species Act or to propose specific solutions. Although the Coalition will continue to be an active participant in the debate over how the Act should work in the future, my goal today is to share my perspective on how the Act was intended to work, and to compare that intent to how the Act has actually worked. In short, my objective today is to help the subcommittee to frame the debate.

As I go through the history of the Act, I think you will see a common thread to my testimony. When the Endangered Species Act was passed in 1973, it was a grand and noble experiment. It was an effort to legislate the lofty ideal of a national effort to conserve species, and it was unique in its scope. Although there had been two previous Federal laws of more limited scope, nothing like it had ever been done before on the Federal level to conserve endangered species. As a result, there was significant uncertainty in Congress about the best way to accomplish the very important goal of species conservation on the Federal level.

There was also significant uncertainty about the effect that the Act would have on other Federal responsibilities—how it would interact with other laws, and how it would affect the nation's ability to achieve other important goals. In short, there was very little real information upon which we could predict the effects of the En-

dangered Species Act.

In the end, Congress did the best it could with the information available to it twenty-one years ago, but of necessity much was left to guesswork. Thus, when the Act was passed, it was with the understanding that it would be revisited periodically. Indeed, Congress has amended the Endangered Species Act 13 times in the

twenty-one years since its enactment. For instance, Congress revisited the Act after the Supreme Court's 1978 decision in Tennessee Valley Authority v. Hill, and made changes in response to issues raised by that case. My goal, in part, is to suggest that other issues have been raised that Congress did not foresee in 1973, and to offer the Coalition's assistance as you seek to resolve those issues in the weeks and months ahead.

Perspective on the History of the Endangered Species Act

Like many other Congressional actions, the Endangered Species Act is a legislative expression of good intentions held by a great many people in this country, myself included. Whether the legislation was carefully thought out and constructively applied, however, is a totally different question.

In 1973, Congress had the general intent to protect species from extinction. Beyond that, it was envisioned that the lack of specific direction in some areas could be corrected by the administrative agencies charged with implementing the Act. If the agencies could not or would not apply the Act in a manner which met with Congress' approval, then it was understood that Congress could make corrections, which it has done several times.

Mr. Chairman, I think there are three main points I would like you to take away about what Congress did and did not do in 1973:

First, the Act, of course, only applied to 109 domestic species when it was enacted in 1973. Since 1973, the number of listed species has increased to more than 800. In 1992, the Fish and Wildlife Service entered a consent decree calling for the listing of hundreds more species in the next few years. looking back, I perceive that we never really thought about what would happen as the numbers of species increased, particularly to the point where choices would have to be made between species in the same geographic area.

We did not debate at any length regarding the process for listing a species. I think we just never contemplated, in 1973, that the Act would reach as far and wide as it has. I am sure that we did not have any perception of the regional scope of some of the listing decisions and the critical habitat decisions which followed. As an aside, I can say with some confidence that many of my colleagues would have been surprised to learn that a legal and administrative structure originally designed to protect 109 species (plus those species that might be added from time to time) might one day be asked to accommodate not only ten times that number of threatened and endangered species, but also potentially 4,000 or more candidate species.

Congress also did not address the problems that have arisen as the needs of endangered species have increasingly conflicted with the public interest. Similarly, we did not address what would happen when the needs of one species conflict with the needs of another species. In other words, in legislating our consciences, we simply

left for later many important practical considerations.

Second, one thing Congress did debate about in some detail was the role of States. We recognized that many States already had programs in place for conservation of threatened and endangered species, and that most States had extensive fish and game management programs. Indeed, until 1973, nearly all species conservation was the responsibility of the States.

Accordingly, while Congress was determined to establish a uniform system for conservation from State to State, we were also very much aware that the States had much to offer in the way of information and expertise developed through their existing programs. In fact, we provided an 18 month period for States to come into compliance with the Federal Endangered Species Act. We intended that State input into the ESA process would be solicited. However, in retrospect, I'm not at all sure that the reassurances we gave the States at the time concerning their input have been fulfilled.

Third, Congress did not spend a lot of time debating how the Endangered Species Act would fit into the existing framework of Federal law. The truth is, in my opinion, that we really did not give it much thought, and to the extent we thought about it, as I have said, we decided we would be able to revisit the statute at a later date.

In some cases Congress deliberately refused to State "intent" because we were not sure how to define it. In other cases, we could not decide the extent or limit of conflict with economic policy or with other law or policy, so we intentionally left it for future action when it became more clear what the extent of the problem was and what was needed. If this seems odd, it should be remembered that we intended to (and did) revisit our other major environmental initiatives, the Clean Air Act and the Clean Water Act. Both were as ambitious as the Endangered Species Act, both were also new Federal initiatives into areas traditionally left to the States, and both have been reworked over time to keep their goals intact but make them more efficient. To lock these statutes into the 1970s would be a mistake and would deny our original intent to have evolving, progressive environmental laws.

Congress' failure to clearly express its intent in some areas was, in retrospect, a mistake. Once the agencies adopted interpretive regulations, and the courts added their own interpretations of Congress' intent, the application of the Act took on a very different look from what Congress thought it was doing. (At least, that is my

opinion. I freely concede that others may take a different view.)

First Major Congressional Reconsideration: The 1978 Amendments

It would be useful here to take a moment to explore what is perhaps the most familiar case highlighting the inflexibility of the Endangered Species Act, and how Congress reacted to it. In 1978, in TVA v. Hill, the Supreme Court decided that the existence of the endangered snail darter in a stream should stop a project that was going to supply relatively inexpensive power to a lot of people. The Court reasoned that the Endangered Species Act was a kind of super law that was specifically intended to trump the application of all other laws and all other interests, and that the Act was completely inflexible. The Court arrived at this conclusion despite the fact that Congress had been informed about the snail darter problem, but had none-theless appropriated funds for construction of the project for 3 years running.

My recollection, which I believe is supported by the legislative history from both before and after TVA v. Hill, is that Congress intended the Act to be more flexible. For example, during Senate consideration of a provision which was substantively similar to the section 7 consultation requirement that was ultimately enacted, Senator Tunney responded to a question about the effect consultation would have on

construction of a road, saying:

[A]fter the consultation process took place, the Bureau of Public Roads, or the Corps of Engineers, would not be prohibited from building such a road if they deemed it necessary to do so. . . . [A]s I read the language, there has to be a consultation. However, the Bureau of Public Roads or any other agency would have the final decision as to whether such a road should be built.

In 1978, in arguing the case of TVA v. Hill, the Carter Administration argued that Senator Tunney's statement meant that Congress intended that the interests of endangered species should be balanced against the public interest, much as is done with the National Environmental Policy Act. The Supreme Court rejected the notion that any such balancing of interests was permissible. In effect, the Court was deciding that the Act requires the public interest to take a back seat, where necessary, to the preservation of a threatened or endangered species.

I would argue that the Court could have made a different interpretation, but the Congress was ambiguous. I believe that Congress believed that the preservation of a species usually would be in the public interest, but that Congress failed to carefully consider what would happen when the public interest and the interest of a spe-

cies diverged.

Subsequent to the decision in TVA v. Hill, there was quite an uproar in Congress. Many of us simply could not believe the original Act had been interpreted to be so inflexible. This sense of surprise transcended party lines and ideologies. Perhaps Senator George McGovern said it best in a statement on the Senate floor on July 18, 1978:

I do not think it was the intent of Congress that in passing the Endangered Species Act in 1973 that we wanted no development to take place in the Mississippi and Central Flyways encompassing the entire Missouri River Basin because the whooping crane is annually sighted in the area. We did not intend to prevent development in the Northwest because it is the range of the grizzly bear. We did not intend to make prairie dog towns inviolate because a black-

[footed] ferret would make a prairie dog town its home. Yet, every time a project is proposed which admittedly could affect these endangered species an extreme case is made and litigation threatened on the assumption the whooping crane will have no room to land, the grizzly bear no room to roam and the black-footed ferret no place to call home. The intent of environmental law is that these species and their habitats be taken into account and that regionally the cumulative impact on them be taken into account if a large area is their habitat, and that their critical habitat not be ruined if it is site-specific. If that is the requirement of the law and it has been met, then that should be the end of it, but too often it is not. \* \* \* \* We can reaffirm our commitment to clean air, clean water, and protection of endangered species, yet at the same time affirm that we are not advocating no growth because of these concerns. Rather, we are committed to the best possible environment in which man and animal can coexist while providing for the needs of man.

Other members of Congress mirrored Senator McGovern's discontent with the Supreme Court's decision and the general status of the Act. For example, Senator Robert Byrd argued in a statement on the floor of the Senate on July 19, 1978 that:

The need to protect our environment must be balanced against our requirements for energy, transportation, and economic development.

I will not belabor the point. Suffice it to say that the weeks and months following the 1978 decision of TVA v. Hill marked a time of significant controversy for the Endangered Species Act. Members of the House soon began to seek site-specific exemptions from the Act. However, when those site-specific exemptions came to the Senate, we took it an extra step, and created a general exemption process. We did not think it made sense to be continually legislating individual exemptions, particularly when many of us believed that the Act should have allowed for a balancing of the public interest in the first place. I argued very strenuously for some kind of policy-balancing—some way to balance the objectives of species protection with other legitimate objectives of public policy. The only provision which the committee would accept was an escape hatch in the event that something happened which was unacceptable, which I believed possible if not predictable but the committee thought inconceivable. So we amended the Endangered Species Act in 1978 to create an "exemption" process whereby the public interest could be found to outweigh the needs of an endangered species.

Despite the uproar over TVA v. Hill, most of us who participated in the ensuing debate, including the leadership of both parties, agreed that the purpose of the Endangered Species Act was still sound. Accordingly, rather than attempting to scrap the Act, we tried to fix it by making it more flexible in line with our original thoughts on how it should work. Unfortunately, the exemption mechanism we created has proven cumbersome and unwieldy. Thus, despite the surge in the number of listed species, and the resulting increase in adverse economic impacts throughout the economy, the exemption process has only been triggered a handful of times, such as in the case of the Urey Rocks Reservoir, and in the case of the Northern Spotted Owl.

In sum, Congress showed in 1978 that it could change the Act to accommodate perceived problems in implementation. We did so again in 1982 when we amended the Act to enable the agencies to issue permits for "incidental takes" of protected species. Those precedents are important as we open this new debate.

### The Endangered Species Act: Past And Present

Mr. Chairman, I mentioned early on that one of my goals today was to show the current Act through the lens of history, if you will, by highlighting facets of the Act's current implementation and impact that were either unforeseen in 1973, or were viewed differently at that time. With that in mind, I would like to succinctly outline some of the questions I see facing the committee at this time. It would be useful, perhaps, to separate the Act into two or three components; for example, listing, identification of critical habitat and development of recovery plans—i.e., should a species be listed, and if so, what should we do about it?

The listing is, and should be a purely scientific decision, unconstrained by other considerations, wholly separated from the actions which follow. It should, however,

be based upon good science and that fact should be subject to appropriate opportunity to test the scientific evidence and conclusions, including administrative and legal review. That is not always the case today.

Present law provides that the actions which follow should permit the consideration of other factors, but this clearly does not happen today. Congress should review current law and practice and clearly legislate what should be considered, who should participate and by what processes. Congress should also clearly separate the several steps so that they are not merged or ignored.

First, to what extent will greater use of sound science be required? The Act currently calls for the use of the best scientific and commercial evidence available. Nonetheless, in the last half year, at least four Federal courts have faulted the Federal Government for abuse of the process of gathering scientific information and/or making it available for public review. Also important in the context of sound science is the fact that the process for designation of candidate species is extremely informal. The question arises of how such informal designation standards fit with the original congressional intent that protection only be extended on the basis of sound scientific review. Second, to what extent will balancing of economic interests, such as private property rights, be incorporated into the ESA decision-making process?

In 1973, Congress was not sure what the economic impacts of species conservation under the ESA would be. To the extent that some of us were concerned about potential impacts on private property rights, we were told, informally, to let things develop, and if excessive problems occurred, Congress could correct them. Today, it appears that the economic impacts of the Act are incalculably large.

We also neglected, in 1973, to consider at any length the effect of this Act in a world marketplace. Thus, when the spotted owl results in the shutdown of significant logging activities in the Pacific Northwest, nothing in the Act requires, or even allows, weighing of probable impacts on species and environments in other countries, or even in other parts of this country, as those millions of board feet are replaced by other logging.

Third, who can challenge a decision to list a species? While Congress manifested its concern that interested parties should be able to challenge a decision not to list a species, we neglected to make a specific provision conferring the right to challenge a decision to list a species on a party who might suffer adverse consequences from such a listing.

Fourth, what is a species? In particular, what should be considered a distinct population group warranting the Act's protection? Congress failed to settle on a firm definition during my tenure. As I recall the debates, concerns about distinct population groups focused on highly visible distinct populations, such as grizzly bears and grey wolves. The original Act defined species to include "any other group of fish or wildlife of the same species or smaller taxa in common spatial arrangement that interbreeds when mature." An argument had broken out as to whether the Act required and/or permitted the protection of the grizzly bear in the lower 48 States when, without question, there were plenty of grizzly bears in Maska and the "species," as a whole, was not threatened. The same argument was made with respect to the grey wolf. The question was whether the language quoted was intended to cover that precise situation. The 1978 Amendments changed the definition of species to include "any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." While we did clarify that it was possible to protect distinct populations of vertebrates, I think many of the members of Congress who supported that measure would be surprised to see how far the protection of distinct populations has extended, to the point where a recent petition for listing of steelhead trout in the Pacific Northwest purported to identify close to 200 distinct population groups, each supposedly warranting individual protection, even if the sole difference was that they spawned in different tributaries of the same river.

Fifth, to what extent will attempts be made to mitigate the sometimes harsh impacts of the Act by providing for pre-listing species conservation? In 1973, I will venture, we lacked the vision and experience necessary to make the Act work better and more cost-effectively. We saw that species were reaching the brink of extinction, and took steps to prevent such species from becoming extinct; but we failed to take the next step—to create a system in which the heavy-handed mechanisms for pro-

tecting endangered species become less intrusive, because fewer species become endangered. By failing to develop a system for pre-listing conservation, we were in part responsible for the dramatic expansion of the number of species listed as threatened or endangered, and for the severe economic consequences that resulted.

Sixth, to what extent will existing mechanisms for State-Federal cooperative agreements be reinforced and improved? In 1973, Congress envisioned (and provided for) a cooperative effort to combine State and Federal resources to conserve endangered species. In 1982, we expanded that concept by providing for "incidental take" permits for actions in conformance with approved cooperative agreements. Nonetheless, it may be that we failed to adequately emphasize the importance of cooperative management agreements to ensure the most effective and efficient use of limited resources to achieve the objectives of the Act.

### Conclusion

In conclusion, Mr. Chairman, I would like to thank you and the distinguished members of this subcommittee for allowing me to appear before you. I have endeavored today to relate some of the Act's legislative history, and to identify issues which will shape the debate, without advocating particular solutions for those problems. As I stated at the outset, I believe this type of education is a critical part of the process, because the experiences of the last 21 years have taught us much that we did not know in 1973.

It is my hope, and that of the National Endangered Species Act Reform Coalition, that this is the beginning of a constructive debate. To that end, we hope you will continue to seek the input of Coalition representatives in future hearings. We believe we have much to offer, both as an information resource and as a source of ideas on ways to make the Act stronger and more efficient.

I will close, Mr. Chairman, on a positive note. I believe that you will find that the various interests represented in the reauthorization debate agree in principle on more concepts than they disagree on. In particular, I think we all agree that the Act needs to do a better job of protecting the species it is supposed to protect. Of course, the saying is that the devil is in the details, and that certainly seems to be the lesson of the last twenty-one years of Endangered Species Act implementation. Nonetheless, I believe you will find, as you proceed, that many positions are close enough that meaningful dialogue and compromise is possible.

Thank you, Mr. Chairman. I would be pleased to respond to any question you or the members of the subcommittee may have.

# Endangered Species Coalition

Celebrating the Diversity of Life: Iwenty Years of the Endangered Species Act

January 25, 1994

### Dear Senator:

The Endangered Species Coalition welcomes you back to Washington, D.C. for the second session of the 103rd Congress. On December 28th, the Endangered Species Act celebrated its 20th anniversary. The occasion was noted in news stories around the country, some of which are enclosed with this letter.

The Act has had many remarkable successes in its 20 year history. One recent example was the announcement by the U.S. Fish and Wildlife Service that bald eagles may no longer be an endangered species and should be downlisted to the less-serious status of "threatened." We hope that as you move into this next session of Congress, you will work to see that this type of success story becomes the rule, rather than the exception.

The 100 environmental, scientific, business, religious, and animal welfare organizations which make up the Endangered Species Coalition support S. 921 as a good starting point for reauthorization. We are calling on you to help strengthen the Endangered Species Act.

Sincerely,

Studler

Director

666 Pennsylvania Ave., SE Washington, D.C. 20003 202-547-9009 202-547-9022 fax

The Endangered Species Coalition is a voluntary alliance of nearly 100 environmental, scientific, and animal welfare organizations committed to broadening and mobilizing public support for the Endangered Species Act.

American Association of Botanical Gardens and Arboreta, Inc.

American Association of Zoo Veterinarians

American Association of Zoological Parks and Aquariums

American Cetacean Society

American Hiking Society

American Humane Association

American Institute of Biological Sciences American Ornithologists' Union

American Planning Association
American Rivers

American Society for the Prevention of Cruelty to Animals

American Society of Mammalogists Andropogon Associates, Ltd. Animal Protection Institute Biodiversity Legal Foundation California Native Plant Society

Center for Development of International Law Center for Environmental Citizenship Center for Marine Conservation Center for Plant Conservation Center for Wildlife Information Cetacean Society International

Chewonki Foundation Defenders of Wildlife Desert Fishes Council

Earthways

Endangered Species Zoological Society Environmental Defense Fund

Environmental Investigation Agency
Environmental Protection Information Center, Inc.

Environmental Resource Center Florida Audubon Society Forest Conservation Council Forest Guardians

Fund for Animals
Garden Club of America
Grand Canyon Trust
Greater Ecosystem Alliance
Greater Yellowstone Coalition

Greenpeace Hoosier Environmental Council

Humane Society of the United States Idaho Conservation League

In Defense of Animals

In Defense of Endangered Species
Inland Empire Public Lands Council
International Council for Bird Preservation

Jackson Hole Alliance for Responsible Planning

John G. Shedd Aquarium

Key Deer Protection Alliance Maine Audubon Society Massachusetts Audubon Society

Massachusetts Society for the Prevention of Cruelty to Animals

Mount Graham Coalition National Audubon Society

National Foundation to Protect America's Eagles
National Parks and Conservation Association
National Recreation and Parks Association

Native Seeds/SEARCH Natural Areas Association

Natural Resources Defense Council New England Wild Flower Society

New York State Wildlife Rehabilitation Council NYZS/The Wildlife Conservation Society

Oregon Natural Resources Council

Pacific Coast Federation of Fishermen's Associations

Pacific Rivers Council

Performing Animals Welfare Society Raptor Research Foundation, Inc. Red Butte Garden & Arboretum RESTORE: The North Woods Save America's Forests Save the Manatee Club

Sierra Club

Sierra Club Legal Defense Fund
Society for Animal Protective Legislation
Society for Conservation Biology
Southern Utah Wilderness Alliance
The Alabama Conservancy
The Holden Arboretum

The Holden Arboretum
The Wilderness Society
The Wildlife Society
Trout Unlimited

U.S. Public Interest Research Group Union of American Hebrew Congregations Unitarian Universalist Seventh Principle Project

Washington Trout Water Watch Watershed Initiative Wild Again, Inc. Wild Harvest

Wildlife Center of Virginia

Wildlife Rehabilitators Association of MA Wolf Education and Research Center

Wolf Recovery Foundation World Wildlife Fund Xeroes Society

Zoological Society of Philadelphia

1/24/94

Endangered Species Coordinating Council

June 15, 1994

The Honorable Bob Graham Chairman Subcommittee on Clean Water, Fisheries and Wildlife Committee on Environment and Publc Works United States Senate Washington, D.C. 20510

Dear Chairman Graham:

On behalf of the Endangered Species Coordinating Council (ESCC), I would like to thank you for scheduling a series of hearings on the Endangered Species Act of 1973 (ESA) and various issues that arise under this most important and intractable environmental law. At your first hearing, the witnesses have described for the Subcommittee the background and history of this statute, as well as its evolution to the present day. Secretary Babbitt has explained his administrative initiative to add flexibility to implementation of the ESA.

Since we were not invited to share our perspective in person, we would like to provide the Subcommittee for inclusion in the record our views as it engages this difficult issue. First, Secretary Babbitt's efforts will achieve only limited success unless and until Congress amends the ESA to give the Secretary a legal foundation. Second, both the Endangered Species Act Procedural Reform Amendments of 1993 as introduced by Senator Shelby, S. 1521, and the Endangered Species Act Amendments of 1993 as introduced by Senator Baucus, S. 921, target the areas where these amendments should focus, and in fact target the same areas for the most part. As noted above, Secretary Babbitt also agrees that these issues must be addressed.

The ESCC is a coalition of more than 200 companies, associations, individuals and labor unions involved in ranching, mining, forestry, manufacturing, fishing and agriculture. We seek to provide workable procedures and positive incentives in the ESA which promote conservation of wildlife in a way that considers economic factors and respects the rights of private property owners without impairing its fundamental commitment to protect listed species. The ESCC has endorsed S. 1521 as legislation which will achieve these goals but also recognizes that S. 921 addresses the issues as well.

As the Subcommittee proceeds through the schedule of hearings, the members will hear stories on both the positive and negative impacts of the ESA. These stories, together with Secretary Babbitt's efforts at flexibility, must be weighed against the solutions contained in S. 1521 and S. 921. Therefore, we think it is important to understand the relationship of Secretary Babbitt's efforts with the legislation and the similarities between the bills so that workable solutions may be identified.

P.O. Box 33273 Washington, D.C. 20033-0273 Phone: (202) 463-2746 We applaud the Secretary's efforts and are pleased that he has adopted many of the issues which have been identified by Sen. Shelby in his legislation to reauthorize the ESA. The ESCC has encouraged Congress for some time to solve these issues. We welcome Secretary Babbitt's recognition that these problems need to be addressed. However, we believe that a statutory foundation must be put in place to make these changes effective.

Too often in the past, flexible and innovative interpretations of the ESA have been struck down by the federal courts. Some of Secretary Babbitt's proposals have actually been attempted in the past but were unsuccessful due to resistance from opponents. Congress itself needs to send the message that these problems exist and that the solutions are explicitly set out in the law. Otherwise, future Secretaries of the Interior will be under constant pressure either to water down Secretary Babbitt's policies or to eliminate them altogether.

Providing Secretary Babbitt with a statutory foundation is not as difficult as it would seem. Both bills pending in the Senate address all the issues for which the Secretary seeks to provide administrative guidance, as well as other important areas.

The ESA requires that species be listed "solely on the basis of the best scientific and commercial evidence available," but the law does not ensure the quality or reliability of the "best evidence available." Secretary Babbitt recognized the importance of using quality science for ESA decisions in his proposals. Both bills incorporate peer review into the ESA in recognition that this is the system of quality control used by science. Given this agreement, the Subcommittee may focus on such issues as mandatory or discretionary peer review, how to ensure the integrity of the peer review document, and whether the review should be limited to what is published in the Federal Register or should the underlying status review document be submitted.

Given the time frames the Service must work under, the "best" scientific data <u>available</u> may fall far short of the biological data <u>necessary</u> for a true appraisal of the species' status. Once a decision is made, there is a substantial risk of "confirmatory bias" - the tendency to emphasize and believe experiences that support one's views and to ignore or discredit those that do not. S. 1521 attempts to fight this tendency by requiring identification of missing data, collecting the information, and then reviewing the decision. S. 921 also recognizes this issue by requiring the proposed listing to identify data needed for the recovery plan. Again, the bills have identified the issue, allowing the Subcommittee to focus on the most efficacious solution.

Economic and social considerations are not a significant factor in the ESA. As noted above, listings are appropriately based "solely" on scientific data. The only place Congress specifically addresses overall impacts from conservation of a species is in the designation of critical habitat. While we recognize that other mechanisms in the ESA provide some adjustment for the economic disruption caused by species conservation, only for critical habitat does anything resembling a "programmatic" impact analysis occur. Unfortunately, even this consideration falls far short of what is needed.

When proposing to designate an area as critical habitat, the Secretary must "take into consideration the economic impact, and any other relevant impact," of the designation. The Secretary may exclude areas from the designation if "the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat," provided exclusion of a particular area would not result in extinction of the species. However, while admitting that most impacts occur as a result of listing a species, the Secretary limits consideration to the incremental

impacts resulting from designation. Since less than 20% of listed species have designated critical habitat, over 80% have had no consideration of even these limited impacts.

Both Senator Shelby and Senator Baucus recognize the importance of considering social and economic impacts from species conservation and both identify the recovery plan as the appropriate forum for doing so. Secretary Babbitt seeks to do this as well. The bills require recovery decisions to include a human component, not at the expense of the species but to ensure that conservation does not proceed at the needless expense of jobs and the welfare of local communities. In addition, both bills generally heighten the importance of the recovery plan in the ESA process and give priority to integrated recovery plans. The Subcommittee should closely consider these proposals and give the agencies clear direction on the content of the plan and the basis of decisions.

Both Senators also realize the need to provide more certainty to private landowners. Both bills contain provisions which ratify development of conservation plans for multiple species, including unlisted species, and issuance of incidental take permits, thus providing a level of statutory comfort to Secretary Babbitt's efforts in this area. H.R. 2043, the House companion to S. 921, requires issuance of procedures by which a private landowner may obtain an assessment of whether a proposed action would be a take. S. 1521, on the other hand, contains a variety of mechanisms allowing a private party to conduct lawful activity and at the same time avoid significant impacts to the species. The Subcommittee should give careful considerations to these issues in order to avoid placing all the burdens of species conservation on the few landowners who happen to own habitat.

Finally, both bills also consider the importance of giving incentives to private landowners to work for conservation. S. 1521 sets out some specific examples while S. 921 directs that the issue be given careful study by the Secretary. We urge the Subcommittee itself to conduct this study and to include concrete incentives in this legislation.

Sincerely

William R. Murray Executive Director

### STATEMENT OF THE WESTERN URBAN WATER COALITION

Urban populations in the West continue to grow rapidly. The Western Urban Water Coalition (WUWC) was established in recognition of the critical role that water plays in the evolution of the most urbanized regions of the western United States. Water requirements for municipal, agricultural and environmental purposes have increased competition for the finite water resources of this region. Application of the Endangered Species Act (ESA) in the West has heightened this competition by requiring that water resources be reserved and used for the conservation and recovery of species protected under that law. The reauthorization of the ESA offers an opportunity to assess the relationship between the demands placed upon water resources for municipal, agricultural and biological purposes, and to make appropriate adjustments to the statute and the manner in which it has been implemented to the changing water usage demands and environmental values of the modern West.

The WUWC's approach to water management embodies a conservation ethic shared by the ESA. However, to be able to successfully advance this ethic the ESA must encourage conservation efforts before species are endangered or threatened and must adequately and promptly follow through with recovery efforts for listed species. The fact that critical habitat has been designated for only 20 percent of the species listed and that recovery plans have been developed for less than 50 percent the listed species is ample proof that traditional implementation of the ESA has not been as effective as it should be. This problem will only worsen with over 3,000 additional species now being considered as candidates for listing.

Water utilities are increasingly frustrated over the uncertainty and delay encountered by projects subject to ESA requirements. Traditional ESA programs emphasize single species efforts, often initiated only when species are facing extinction. Such crisis management results in constantly changing, often fragmented recovery programs that are inherently protracted and costly.

If the ESA is to reach its full potential for conserving the habitat of endangered and threatened species, the traditional manner in which it has been implemented must change. These changes should include: a broadening of ESA efforts from a single species focus to a multiple species approach; the authorization of proactive intervention before a species is listed; the use of a consistent and publicly accessible decision-making process in executing ESA requirements; and better management of mitigation and recovery programs. Each of these areas of concern, as well as specific recommendations on changes that should be made to the ESA, are described in greater detail in the text that follows.

Mitigation And Recovery Programs Should Be Broadened From Single Species To Multiple Species Conservation Efforts In Order To Foster Ecosystem Preservation

Broadened efforts focusing on the ecosystem of which listed species are a part would provide more comprehensive protection of species. Current programs focus on recovery and preservation of single species. Such programs may benefit listed species, but they can fail to protect unlisted species or ensure biological diversity. Designation of critical habitat and development of recovery plans for a single species allow habitat modifications that may be detrimental to other coexisting species, and they can delay protection until the capacity of a habitat to support a diverse biota is severely compromised.

The discretionary use of a multiple species habitat conservation initiative, as an alternative to single species conservation and recovery programs, provides a process for long-term planning by states and local agencies to avoid resource conflicts. It also provides a flexible and effective tool that allows the private sector and resource users to work cooperatively with the Federal Government, and it promotes ESA goals without stifling needed resource development and economic growth initiatives.

### Recommendations

• Encourage multiple species habitat conservation plans, incidental take permits, and similar initiatives as a discretionary alternative to single species recovery plans.

 Assign agencies responsible for implementing ESA programs to develop a process that prioritizes efforts to recover and protect ecosystems on a regional

or subregional basis.

• Expand the Species Recovery Priority System, developed by the U.S. Fish and Wildlife Service (USFWS) for single species recovery plans, to apply to multiple species recovery actions that have the greatest opportunity to reduce relative risk in ecosystems containing threatened and endangered species

Proactive Conservation Initiatives Must Be Used To Resolve Species Conservation Problems Before Species Are Listed

Authorization of early intervention would protect species and ecosystems in a more cost-effective manner. Proactive conservation initiatives, undertaken before species are listed as endangered or threatened, prevent conditions from deteriorating to levels that require (a) severe restrictions on human activity in a habitat, and (b) intensive and expensive recovery efforts. Proactive implementation of such programs would emphasize a consensus approach to conservation issues, and it would avoid the delays that result from the present listing and recovery processes which are often adversarial in nature. Delays in the cumbersome listing process may also exacerbate conditions in an already deteriorating ecosystem, as well as deferring needed habitat preservation and recovery efforts.

A geometric increase in the number of proposed listings will further stress the ability of responsible agencies to react to deteriorating ecosystems. Conservation efforts will be delayed because these agencies do not have staff resources to conduct the studies and document the need for species listing that initiates the ESA process.

There is a growing recognition that in many cases the most effective way to deal with the current situation is through multi-species programs initiated in advance of listing. In order to accomplish this, the ESA must be amended to give formal recognition to such programs, to assure those undertaking these efforts that they will receive appropriate authorization for incidental take of species covered by these advance plans, and to provide that actions undertaken in accordance with such a plan will be considered to be consistent with the "no jeopardy" requirements of the ESA.

The goals of such programs would be to: (1) make listing a species unnecessary due to proactive multi-species management efforts; (2) reduce the impacts of a future listing should it occur; (3) provide an in-place mechanism to resolve listing associated problems to avoid delays in on-going projects; and (4) establish the basis for more effective recovery efforts that will have the least adverse impact on development projects for species that are, or will become, listed under the ESA.

### Recommendations

• Authorize USFWS and National Marine Fisheries Service (NMFS) to enter into pre-listing agreements and to offer incentives to develop programs that en-

hance habitats on a multi-species basis.

 Require USFWS and NMFS to develop and support cooperative, single and multi-species habitat conservation plans (HCPs) that would provide for the incidental take of any species that is listed in the HCP as long as the Plan is effective.

 Authorize Federal funding that provides resources to support development and implementation of regional programs (e.g., Federal land use fees, mitigation banking agreements).

A Consistent And Accountable Decision Process Must Be Used To Execute Provisions Of The Endangered Species Act

A uniform decision-making process based on scientifically credible information would improve species preservation and habitat protection efforts. If stakeholders in agency decisions are able to review and comment at critical points in the process, there would be clearer expectations and greater confidence that program efforts would benefit endangered and threatened species.

Implementing agencies often lack sufficient staff and resources to thoroughly review and consistently apply all available data when preparing listing decisions, biological opinions, incidental take permits, and recovery plans. This has caused protracted, acrimonious debates that often result in judicial challenge. Such litigation

fails to provide timely protection for threatened and endangered species, and it often impedes or halts important water resource development projects. Greater confidence in the credibility and consistency of ESA decisions reduces the hesitation of agencies, developers and the public to participate in the process, and speeds implementation of ESA decision-making and recovery initiatives.

Equally important, species conservation/ecosystem preservation programs based on sound technical information and objective decision-making provide the most cost-effective use of limited resources. For example, designation of critical habitat based on accurately characterized sites results in focused recovery programs that use the minimal resources necessary to achieve program objectives.

It is in the best interests of ESA stakeholders, including municipal water utilities, to assist USFWS and NMFS to acquire the resources necessary to gather, evaluate and utilize sound scientific information. Additional resources could be made available through memoranda of understanding between stakeholders and USFWS and NMFS, or through agreements with state or regional agencies assisting the Federal agencies.

### Recommendations

- Develop such mechanisms as cooperative agreements with other stakeholders to provide technical assistance to Federal agencies in undertaking analysis of biological data, public comments, and other pertinent information needed to make objective, thoroughly-researched and publicly accountable decisions under the ESA.
- Encourage promulgation of regulations and agency guidelines that require agencies implementing ESA programs to develop comprehensive, step-by-step procedures to guide agency decisions and public participation in all key aspects of ESA implementation, including recovery plans, listing decisions, biological opinions and critical habitat designations. Guidance should emphasize procedural standardization and a uniform decision-making process.

Implementation Of Conservation Programs Must Be Better Prescribed And Managed

One frustration with the ESA is that recovery efforts are not always implemented expeditiously or effectively. Species conservation efforts that result from recovery programs do not always contain measurable milestones by which progress toward species recovery can be gauged. This limits the ability of responsible agencies and regulated parties to evaluate the effectiveness of such efforts and the time and costs estimated to achieve the plan's goals. Moreover, responsible' agencies have no means to require other Federal or regional agencies and other parties to implement the actions identified in the plans. Thus, delayed recovery efforts place species and habitats at greater risk, and require more extensive and costly actions when the efforts are initiated. Recovery of listed species is the underlying goal of the ESA, and more must be done to strengthen and expedite agency recovery programs.

### Recommendations

- Require conservation and recovery programs to be more detailed, and include requirements for content, recovery milestones, mid-course progress evaluations, and projected time frames for ultimate recovery and delisting.
- Emphasize implementation of conservation programs in accord with recovery plan requirements.

103D CONGRESS 1st Session

# S. 921

To reauthorize and amend the Endangered Species Act for the conservation of threatened and endangered species, and for other purposes.

### IN THE SENATE OF THE UNITED STATES

MAY 6 (legislative day, APRIL 19), 1993

Mr. BAUCUS (for himself, Mr. CHAFEE, Mr. GRAHAM, Mr. MOYNIHAN, Mr. MITCHELL, Mr. LIEBERMAN, Mrs. BOXER, Mr. SARBANES, Mr. PELL, Mr. KENNEDY, Mr. LEAHY, Mr. KERRY, Mr. AKAKA, and Mr. DURENBERGER) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

## A BILL

- To reauthorize and amend the Endangered Species Act for the conservation of threatened and endangered species, and for other purposes.
  - 1 Be it enacted by the Senate and House of Representa-
  - 2 tives of the United States of America in Congress assembled,
  - 3 SECTION 1. SHORT TITLE.
  - 4 This Act may be cited as the "Endangered Species
  - 5 Act Amendments of 1993".

=1- <b>SEC.</b>	2.	AMENDMENT	OF	ENDANGERED	SPECIES	ACT	OF
2 .	-	1973.					

- 3 Except as otherwise expressly provided, whenever in
- 4 this Act an amendment or repeal is expressed in terms
- 5 of an amendment to, or repeal of, a section or other provi-
- 6 sion, the reference shall be considered to be made to a
- 7 section or other provision of the Endangered Species Act
- 8 of 1973 (16 U.S.C. 1531 et seq.).

### 9 SEC. 3. LISTING AND DELISTING IMPROVEMENTS.

- 10 (a) DELISTING.—Section 4(a) (16 U.S.C. 1533(a))
- 11 is amended by adding the following new paragraph:
- 12 "(4) The Secretary shall by regulation promulgated
- 13 in accordance with subsection (b) determine whether any
- 14 species is no longer an endangered species or a threatened
- 15 species because of a change in the factors identified under
- 16 paragraph (1).".
- 17 (b) STATE PARTICIPATION.—Section 4(b)(1)(A) (16
- 18 U.S.C. 1533(b)(1)(A)) is amended by inserting "soliciting
- 19 and fully considering scientific and commercial data con-
- 20 cerning the status of the species from the State agency
- 21 in each appropriate State, if any, and" after "and after".
- 22 (c) Listing Priorities.—Section 4(b)(1)(B) (16
- 23 U.S.C. 1533(b)(1)(B)) is amended to read as follows:
- 24 "(B) In carrying out this section, the Secretary shall
- 25 give consideration to species the conservation of which is
- 26 most likely to reduce the need to list other species depend-

ľ	ent upon the same ecosystem. In addition, the Secretary
2	shall give consideration to species which have been-
3	"(i) designated as requiring protection from un-
4	restricted commerce by any foreign nation or pursu-
5	ant to an international agreement; or
6	"(ii) identified as in danger of extinction, or
7	likely to become so within the foreseeable future, by
8	any State agency or by any agency of a foreign na-
9	tion that is responsible for the conservation of fish
10	or wildlife or plants.".
11	(d) Scientific Peer Review.—Section 4(b)(5) (16
12	U.S.C. 1533(b)(5)) is amended—
13	(1) by redesignating subparagraphs (D) and
14	(E) as subparagraphs (E) and (F), respectively, and
15	(2) by inserting after subparagraph (C) the fol-
16	lowing:
17	"(D) in the case of a regulation to implement
18	a determination, request views on the proposed regu-
19	lation from at least three independent referees who,
20	through publication of peer-reviewed scientific lit-
21	erature, have demonstrated relevant scientific exper-
22	tise, if any person files within 30 days after the date
23	of publication of general notice a written request de-
24	tailing a substantial scientific basis for questioning

- 1 the sufficiency or accuracy of the available data rel-
- 2 evant to the determination;".
- 3 (e) COORDINATION OF CRITICAL HABITAT DESIGNA-
- 4 TIONS AND RECOVERY PLANS.—Section 4(b)(6) (16
- 5 U.S.C. 1533(b)(6)) is amended by adding at the end
- 6 thereof the following:
- 7 "(D) If the Secretary, under subparagraph (C), ex-
- 8 tends the one-year period, any final regulation designating
- 9 critical habitat shall incorporate relevant information
- 10 gathered during the development of the appropriate recov-
- 11 ery plan under section 5.".
- 12 (f) IDENTIFICATION OF DATA.—Section 4(b) (16
- 13 U.S.C. 1533(b)) is amended by adding at the end the
- 14 following:
- 15 "(9) The Secretary shall identify and publish in the
- 16 Federal Register with a proposed rule under paragraph
- 17 (1) of subsection (a) a description of any additional sci-
- 18 entific and commercial data that would assist in the prepa-
- 19 ration of a recovery plan under section 5 for the species
- 20 to which the proposed rule relates.".
- 21 SEC. 4. RECOVERY PLANNING IMPROVEMENTS.
- 22 (a) DEVELOPMENT AND IMPLEMENTATION OF RE-
- 23 COVERY PLANS.—Section 5 (16 U.S.C. 1534) is
- 24 amended—

1	(1) by redesignating subsections (a) and (b) in
2	order as subsections (e) and (d); and
3	(2) by striking "LAND ACQUISITION" and all
4	that follows through "SEC. 5." and inserting the fol-
5	lowing:
6	"RECOVERY OF ENDANGERED SPECIES AND
7	THREATENED SPECIES
8	"Sec. 5. (a) Recovery Plans.—
9	"(1) In general.—
10	"(A) The Secretary shall, in cooperation
11	with the State agency in each appropriate
12	State, and on the basis of the best scientific
13	and commercial data available, develop and im-
14	plement plans (hereinafter in this subsection re-
15	ferred to as 'recovery plans') for the timely con-
16	servation of endangered species and threatened
17	species listed pursuant to section 4 (hereinafter
18	in this section referred to as 'covered species')
19	and the habitats upon which such species de-
20	pend, unless the Secretary finds that such a
21	plan will not promote the conservation of a spe-
22	cies.
23	"(B) The Secretary shall, consistent with
24 ·	subparagraph (A), seek to minimize adverse so-
25	cial and economic consequences that may result
26	from implementation of recovery plans.

- 1	"(C) The Secretary shall develop and im-
2	plement a recovery plan for a species—
3	"(i) by not later than December 31,
4-	1996, in the case of a species included in
5	the list published under section 4(c) before
6	January 1, 1996, and for which no recov-
7	ery plan was developed before that date;
8	and
9	"(ii) by not later than 18 months
10	after the date on which a species is first
11	included in a list published under section
12	4(c), in the case of any species that is first
13	included in such a list on or after January
14	1, 1996.
15	"(2) Priorities for developing and imple-
16	MENTING RECOVERY PLANS.—The Secretary shall
17	give priority to—
18	"(A) the development and implementation
19	of integrated, multi-species recovery plans for
20	the conservation of threatened species, endan-
21	gered species, or species which the Secretary
22	has identified as candidates for listing under
23	section 4 that are dependent upon a common
24	ecosystem; and

1	"(B) those endangered species or threat-
2	ened species, without regard to taxonomic clas-
3	sification, that are most likely to benefit from
4	recovery plans, particularly those species whose
5	conservation is, or may be, in conflict with con-
6	struction or other development projects or other
7	forms of economic activity.
8	"(3) CONTENTS.—The Secretary shall to the
9	maximum extent practicable incorporate in each re-
10	covery plan—
11	"(A) a description of such site-specific
12	management actions as may be necessary to
13	achieve the goal of the recovery plan for the
14	conservation and survival of the covered species,
15	including actions to maintain or restore
16	ecosystems upon which the covered species are
17	dependent;
18	"(B) objective, measurable criteria which,
19	when met, would result in a determination, in
20	accordance with the provisions of section 4, that
21	the covered species be removed from the list;
22	"(C) estimates of the time required and
23	the cost to carry out those measures needed to
24 ·	achieve the goal of the recovery plan and to
25	achieve intermediate steps toward that goal;

	ŭ
1	"(D) a description of actions that will be
2	taken to minimize adverse social or economic
3	impacts that may result from implementation of
4	the recovery plan;
5	"(E) strategies that utilize existing Fed-
6	eral lands, to the extent that such lands are
7	available, to promote the conservation of the
8	covered species;
9	"(F) an identification of the measures,
10	which if taken by Federal agencies, would con-
11	tribute to the conservation of the covered spe-
12	cies;
13	"(G) an identification of the specific areas
14	or circumstances, if any, in which the develop-
15	ment and implementation of conservation plans
16	under section 10(a)(2) would contribute to the
17	conservation of the covered species;
18	"(H) an identification of the specific areas
19	of circumstances, if any, in which entering into
20	agreements with private landowners under sec-
21	tion 14 would promote the conservation of the
22	covered species; and
23	"(I) an identification of opportunities to
24	cooperate with municipalities, political subdivi-
25	sions of State, and other persons in actions

which would contribute to the conservation of

2	the covered species.
3	"(4) PUBLIC REVIEW AND COMMENT.—
4	"(A) The Secretary shall, prior to final ap-
5	proval of a new or revised recovery plan-
6	"(i) provide public notice and an op-
7	portunity for public review and comment
8	on the plan; and
9	"(ii) consider all information pre-
10	sented during the public comment period.
11	"(B) Each Federal agency shall, before im-
12	plementing a new or revised recovery plan, con-
13	sider all information presented during the pub-
14	lic comment period under subparagraph (A).
15	"(5) Public outreach.—
16	"(A) The Secretary, in developing and im-
17	plementing recovery plans, may procure the
18	services of appropriate public and private agen-
19	cies and institutions and other qualified per-
20	sons.
21	"(B) Recovery teams appointed pursuant
22	to this subsection shall not be subject to the
23	Federal Advisory Committee Act.
24	"(C) The Secretary shall in cooperation
25	with the States solicit the participation of rel-

1	evant Federal agencies and appropriate persons
2	to identify matters under paragraph (3)(E),
3	(F), (G), (H), and (I). •
4	"(6) REPORTS.—The Secretary shall report
5	every two years to the Committee on Environment
6	and Public Works of the Senate and the Committee
7	on Merchant Marine and Fisheries of the House of
8	Representatives on the status of efforts to develop
9	and implement recovery plans for all species listed
10	pursuant to section 4 and on the status of all species
11	for which such plans have been developed.
12	"(b) Monitoring.—
13	"(1) IN GENERAL.—The Secretary shall imple-
14	ment a system in cooperation with the States to
15	monitor effectively for not less than 5 years the sta-
16	tus of all species which have been brought to the
17	point at which the measures provided pursuant to
18	this Act are no longer necessary and which, in ac-
19	cordance with the provisions of section 4, have been
20	removed from either of the list published under sec-
21	tion 4(c).
22	"(2) Preventing risks to recovered spe-
23	CIES.—The Secretary shall make prompt use of the
<i>-</i> 24	authority under section 4(b)(7) to prevent a signifi-

1	cant risk to the well-being of any recovered species
2	referred to in paragraph (1).".
3	(b) Existing Recovery Plans.—
4	(1) CONTINUED EFFECT OF EXISTING PLANS.—
5	Each recovery plan developed under the Endangered
6	Species Act of 1973 before the date of the enact-
7	ment of this Act shall continue in effect until revised
8	by the Secretary (as that term is defined in section
9	3 of the Act) in accordance with the Act as amended
10	by this Act.
11	(2) REVISIONS.—The Secretary (as that term is
12	defined in section 3 of the Endangered Species Act
13	of 1973) may revise each recovery plan developed
14	under the Endangered Species Act of 1973 before
15	the date of the enactment of this Act so as to con-
16	form to section 5 of that Act, as amended by this
17	Act, giving priority to recovery plans whose revision
18	would provide the greatest benefit to species listed
19	under section 4 of that Act and species which the
20	Secretary has identified as candidates for listing
21	under section 4 of that Act.
22	(c) Conforming Amendments.—
23	(1) The table of contents in the first section is
24 ·	amended by striking the item relating to section 5
25	and inserting the following:

<sup>&</sup>quot;Sec. 5. Recovery of endangered species and threatened species.".

1	(2) Section 4 (16 U.S.C. 1533) is amended—
2	(A) by striking subsections (f) and (g);
3	(B) in subsection (h)(4) by striking "sub-
4	section (f) of this section" and inserting in lieu
5	thereof "section 5";
6	(C) by redesignating subsection (h) as sub-
7	section (f); and
8	(D) by redesignating subsection (i) by
9	striking "(i)" and inserting the following: "(g)
10	RESPONSE TO STATE COMMENTS.—".
11	(3) Section 6(d) (16 U.S.C. 1535(d)) is amend-
12	ed by striking "Section 4(g)" and inserting in lieu
13	thereof "Section 5(b)".
14	(4) Section 7(a)(1) of the Land and Water
15	Conservation Fund Act of 1965 (16 U.S.C. 4601-
16	9(a)(1)) is amended by striking "Section 5(a)" and
17	inserting in lieu thereof "Section 5(c)".
18	SEC. 5. IMPROVED COOPERATION WITH THE STATES.
19	Section 6(a) (16 U.S.C. 1535(a)) is amended by add-
20	ing at the end thereof the following sentence: "In cooper-
21	ating with State agencies in carrying out this Act, the Sec-
22	retary shall not be subject to the Federal Advisory Com-
23	mittee Act.".

1	SEC. 6. ACTIONS ON FEDERAL LANDS TO PREVENT LISTING
2	OF SPECIES.
3	(a) POLICY OF CONGRESS.—Section 2(c)(1) (16
4	U.S.C. 1531(c)(1)) is amended to read as follows:
5	"(1) It is further declared to be the policy of
6	Congress that all Federal departments and agencies
7	shall conserve endangered species, threatened spe-
8	cies, species which have been proposed for listing,
9	and species which the Secretary has identified as
0	candidates for listing under section 4 and shall uti-
l 1	lize their authorities in furtherance of this policy
12	and the purposes of this Act.".
13	(b) FEDERAL AGENCY AGREEMENTS FOR THE CON-
14	SERVATION OF CANDIDATE SPECIES.—Section 7(a)(1)
15	(16 U.S.C. $1536(a)(1)$ ) is amended by inserting "(A)"
16	after " $(1)$ " and by adding the following new subpara-
17	graph:
18	"(B) The head of each Federal agency respon-
19	sible for the management of lands and waters-
20	"(i) shall, by not later than December 31,
21	1994, prepare and provide to the Secretary an
22	inventory of endangered species, threatened
23	species, species which have been proposed for
24	listing, and species which the Secretary has
25	identified as candidates for listing under section

1	4, which are located on lands and waters within
2	the jurisdiction of the agency;
3	"(ii) shall, by not later than December 31,
4	1995, identify measures to be taken on lands
5	and waters within the jurisdiction of the agency
6	to conserve species which the Secretary has
7	identified as candidates for listing under section
8	4; and
9	"(iii) may enter into agreements with the
10	Secretary to further the conservation of any
11	species which the Secretary has identified as
12	candidates for listing under section 4.".
13	SEC. 7. CONSULTATION ON FEDERAL ACTIONS ABROAD.
14	Section 7(a) (16 U.S.C. 1536(a)) is amended by add-
15	ing at the end the following new paragraph:
16	"(5) Except as provided in subsection 7(j), the provi-
17	sions of this section are applicable to all Federal agencies
18	and agency actions, including extraterritorial actions and
19	actions with extraterritorial effects.".
20	SEC. 8. IMPROVED FEDERAL AGENCY COORDINATION.
21	Section 7(a) (16 U.S.C. 1536(a)) is amended by add-
22	ing at the end thereof the following:
23	"(6) Consolidation of Consultations and Con-
~ 4	

1	"(A) Consultations and conferences under this
2	section between the Secretary and a Federal agency
3	may, if approved by the Secretary, encompass a
4	number of related or similar agency actions to be
5	undertaken within a particular geographic area or
6	ecosystem.
7	"(B) The Secretary may consolidate requests
8	for consultations or conferences from various Fed-
9	eral agencies whose proposed actions may affect en-
10	dangered species, threatened species, or species
11	which have been proposed for listing under section
12	4, that are dependent upon the same ecosystem.".
13	SEC. 9. INCENTIVES FOR CONSERVATION OF CANDIDATE
14	AND OTHER SPECIES ON STATE AND PRIVATE
14 15	AND OTHER SPECIES ON STATE AND PRIVATE LANDS.
15	LANDS.
15 16	LANDS.  (a) CONSERVATION PLANNING.—Section 13 (87)
15 16 17	LANDS.  (a) CONSERVATION PLANNING.—Section 13 (87) Stat. 901; relating to conforming amendments) is amend-
15 16 17 18	LANDS.  (a) CONSERVATION PLANNING.—Section 13 (87) Stat. 901; relating to conforming amendments) is amended to read as follows:
15 16 17 18 19	LANDS.  (a) CONSERVATION PLANNING.—Section 13 (87) Stat. 901; relating to conforming amendments) is amended to read as follows:  "CONSERVATION PLANNING"
15 16 17 18 19 20	LANDS.  (a) CONSERVATION PLANNING.—Section 13 (87) Stat. 901; relating to conforming amendments) is amended to read as follows:  "CONSERVATION PLANNING" "Sec. 13. (a) CONSERVATION PLANNING FOR CAN-
15 16 17 18 19 20 21	LANDS.  (a) CONSERVATION PLANNING.—Section 13 (87) Stat. 901; relating to conforming amendments) is amended to read as follows:  "CONSERVATION PLANNING"  "SEC. 13. (a) CONSERVATION PLANNING FOR CANDIDATE SPECIES.—
15 16 17 18 19 20 21 22	LANDS.  (a) CONSERVATION PLANNING.—Section 13 (87) Stat. 901; relating to conforming amendments) is amended to read as follows:  "CONSERVATION PLANNING"  "Sec. 13. (a) CONSERVATION PLANNING FOR CANDIDATE SPECIES.—  "(1) DEVELOPMENT OF PLANS.—
15 16 17 18 19 20 21 22 23	LANDS.  (a) CONSERVATION PLANNING.—Section 13 (87) Stat. 901; relating to conforming amendments) is amended to read as follows:  "CONSERVATION PLANNING  "SEC. 13. (a) CONSERVATION PLANNING FOR CANDIDATE SPECIES.—  "(1) DEVELOPMENT OF PLANS.—  "(A) Any State, county, municipality, po-

identified by the Secretary as a candidate for
listing under section 4.
"(B) A plan prepared under subparagraph
(A) shall cover an area that, alone or when con-
sidered in association with nearby lands dedi-
cated to conservation, is sufficiently large in
size to encompass adequate suitable habitat
within which the covered species can be main-
tained over the long-term.
"(2) PERMIT ISSUANCE.—If a plan developed
pursuant to paragraph (1) specifies the information
required under section 10(a)(2)(A), and if, after op-
portunity for public comment thereon, the Secretary
makes the findings required under section
10(a)(2)(B) the Secretary shall, upon receipt of such
assurances as the Secretary may require that the
plan will be implemented, issue a permit which shall
be treated, upon the listing under section 4 of any
species for which the plan was developed, as a per-
mit issued pursuant to section 10(a)(1)(B).
"(3) REVIEW UPON LISTING.—Upon the listing
under section 4 of a species for which a permit is

issued under paragraph (2), the Secretary shall-

1	"(A) review the terms and implementation
2	of each permit issued under paragraph (3) for
3	that species;
4	"(B) determine whether each of those per-
5	mittees has complied with the terms of their
6	permit; and
7	"(C) suspend the permit of any of those
8	permittees that is determined under subpara-
9	graph (B) to have not complied with their per-
10	mit.
11	"(b) FEDERAL ASSISTANCE TO STATE AND LOCAL
12	GOVERNMENTS FOR DEVELOPMENT OF PLANS.—
13	"(1) ESTABLISHMENT OF HABITAT CONSERVA-
14	TION PLANNING FUND.—The Secretary shall estab-
15	lish a Habitat Conservation Planning Fund (herein-
16	after referred to in this subsection as 'Fund') which
17	shall—
18	"(A) consist of all sums appropriated pur-
19	suant to section 15(d), and
20	"(B) be administered by the Secretary as
21	a revolving fund.
22	"(2) AUTHORITY TO MAKE GRANTS OR AD-
23	VANCES FROM THE FUND.—The Secretary is author-
2 <b>4</b>	ized to make a grant or interest-free advance from
25	the Fund to any State, county, municipality, or po-

1	litical subdivision of any State to assist in the devel-
2	opment of a plan under this section or section
3	10(a)(2). A grant or advance under this paragraph
4	may not exceed the total financial contribution of
5	the other parties participating in development of the
6	plan.
7	"(3) CRITERIA FOR GRANTS AND ADVANCES
8	FROM THE FUND.—In making grants or advances
9	from the fund, the Secretary shall consider the num-
10	ber of species for which the plan is to be developed,
11	the commitment to participate in the planning proc-
12	ess from a diversity of interests (including local gov-
13	ernmental, business, environmental, and landowner
14	interests), the likelihood of success of the planning
15	effort, and other factors as the Secretary deems ap-
16	propriate.
17	"(4) REPAYMENT OF ADVANCES FROM THE
18	FUND.—
19	"(A) Except as provided in subparagraph
20	(B), sums advanced from the Fund shall be re-
21	paid within 10 years after the date of the ad-
22	vance.
23	"(B) Sums advanced under this subsection
24	for development of a plan shall be repaid within
25	4 years after the date of the advance if-

1	"(i) no plan is developed within 3
2	years after the date of the advance; or
3	"(ii) in the case of an advance for the
4	development of a plan under section
5	10(a)(2), no permit is issued under section
6	10(a)(1)(B) based on the plan within three
7	years after the date of the advance.
8	"(C) Sums received by the United States
9	as repayment of advances from the Fund shall
10	be credited to the Fund and available for fur-
11	ther advances in accordance with this sub-
12	section without further appropriation.".
13	"(b) CONFORMING AMENDMENT.—The table of con-
14	tents in the first section is amended by striking the item
15	relating to section 13 and inserting the following:
	"Sec. 13. Conservation planning.".
16	(c) MITIGATION.—Section 10(a)(2)(A)(ii) (16 U.S.C.
17	1539(a)(2)(A)(ii) is amended to read as follows:
18	"(ii) what measures, such as conservation
19	easements, land acquisition, regulatory controls,
20	exotic species controls, and active habitat man-
21	agement, the applicant will take to minimize
22	and mitigate those impacts and the funding
23	that will be available to implement those meas-
24	ures;".

1	SEC. 10. FEDERAL ASSISTANCE TO HELP PRIVATE LAND-
2	OWNERS CONSERVE SPECIES,
3	(a) INCENTIVES FOR PRIVATE LANDOWNERS.—Sec-
4	tion 14 (87 Stat. 903; relating to a repeal) is amended
5	to read as follows:
6	"INCENTIVES FOR PRIVATE LANDOWNERS TO ASSIST RE-
7	COVERY OF ENDANGERED SPECIES, THREATENED
8	SPECIES, AND CANDIDATE SPECIES
9	"Sec. 14. (a) Assistance Agreements.—The Sec-
10	retary may, in cooperation with the State agency in each
11	appropriate State and subject to the availability of appro-
12	priations under section 15(e), enter into an agreement
13	with any person who is a private landowner, under
14	which—
15	"(1) the person agrees to carry out on land
16	they own activities that the Secretary determines
17	will promote—
18	"(A) the conservation of an endangered
19	species or a threatened species pursuant to a
20	recovery plan; or
21	"(B) the conservation of a species which
22	the Secretary has identified to be a candidate
23	for listing under section 4;
24	"(2) the Secretary agrees to pay to the person
25	such amount as may be agreed by the person and
26	the Secretary

1	"(b) Prohibition on Assistance for Certain
2	REQUIRED ACTIVITIES.—The Secretary may not pay any
3	amount as assistance under this section for any action
4	that is—
5	"(1) required under a permit issued pursuant
6	to subparagraph 10(a)(2)(B);
7	"(2) a condition of any other permit issued
8	under this Act; or
9	"(3) otherwise required under this Act or any
10	other Federal law.
11	"(c) Ensuring Implementation of Agree-
12	MENTS.—The Secretary shall be responsible for ensuring
13	that the terms of the agreements entered into under this
14	section are carried out.
15	"(d) TECHNICAL ASSISTANCE.—The Secretary may
16	provide, to a person who enters into an agreement under
17	this section, technical assistance in the implementation of
18	the activities under subsection (a)(1).".
19	(b) CONFORMING AMENDMENT.—The table of con-
20	tents in the first section is amended by striking the item
21	relating to section 14 and inserting the following:
	"Sec. 14. Incentives for private landowners to assist recovery of endangered species, threatened species, and candidate species.".
22	(c) REPORT ON INCENTIVES FOR CONSERVATION OF
23	Species.—Within 12 months after the date of enactment
24	of this Act, the Secretary, in consultation with the Sec-

1 retary of the Treasury, shall submit to the Senate Com2 mittee on Environment and Public Works and the House
3 Committee on Merchant Marine and Fisheries a report
4 containing—

- (1) a compilation and analysis of existing and potential Federal expenditures, financial assistance, and tax provisions which have the effect of encouraging private landowner conservation of the habitat of endangered species, threatened species, or species which the Secretary has identified to be a candidate for listing under section 4;
  - (2) a compilation and analysis of existing and potential Federal expenditures, financial assistance, and tax provisions which have the effect of discouraging private landowner conservation of the habitat of endangered species, threatened species, or species which the Secretary has identified to be a candidate for listing under section 4;
  - (3) a compilation and analysis of Federal statutory and regulatory mechanisms, including expenditures and financial assistance, which have the effect of discouraging the conservation of endangered species, threatened species, or species which the Secretary has identified to be a candidate for listing under section 4 of the Endangered Species Act; and

1	(4) recommendations based on the compilations
2	and analyses under paragraphs (1), (2) and (3)
3	which would promote conservation of endangered
4	species, threatened species, or species which the Sec-
5	retary has identified to be a candidate for listing
6	under section 4.
7	SEC. 11. IMPROVING INTERNATIONAL CONSERVATION OF
8	SPECIES.
9	(a) WESTERN HEMISPHERE CONVENTION.—Section
0	8A(e) (16 U.S.C. 1537a(e)) is amended—
1	(1) in paragraph (2) by redesignating subpara-
12	graphs (A), (B), and (C) in order as subparagraphs
13	(C), (D), and (E); and
14	(2) by inserting before paragraph (2)(C), as so
15	redesignated, the following:
16	"(A) placement of permanent United States li-
17	aisons in contracting party nations or in regions rep-
18	resenting several contracting party nations, includ-
19	ing Mexico, Central America, northern South Amer-
20	ica, Brazil, southern South America, and the Carib-
21	bean;
22	"(B) cooperation with contracting parties and
23	appropriate international organizations for the pur-
24	poses of—

1	"(i) convening a conference of the parties
2	and appropriate technical meetings on coopera-
3	tive bilateral and multilateral actions to imple-
4	ment the Western Convention, and
5	"(ii) establishing and supporting a Perma-
6	nent Office of Western Convention;";
7	(3) in paragraph (2)(D), as so redesignated, by
8	striking "and" after the semicolon;
9	(4) in paragraph (2)(E), as so redesignated, by
10	striking the period and inserting "; and";
11	(5) by adding at the end of paragraph (2) the
12	following:
13	"(F) implementation of cooperative measures to
14	conserve sensitive and threatened habitats and
15	ecosystems."; and
16	(6) in paragraph (3) by striking "1985," and
17	inserting in lieu thereof "1995, and every three
18	years thereafter,".
19	(b) REGULATIONS TO IMPLEMENT CONVENTION ON
20	International Trade in Endangered Species of
21	WILD FAUNA AND FLORA.—Section 11(f) (16 U.S.C.
22	1540(f)) is amended in the first sentence by striking "en-
23	force this Act," and inserting "enforce this Act and to
24	carry out the Convention and resolutions adopted under
25	the Convention by the parties to the Convention,".

	20
1	SEC. 12. AUTHORIZATION OF APPROPRIATIONS.
2	Section 15 (16 U.S.C. 1542) is amended to read as
3	follows:
4	"AUTHORIZATION OF APPROPRIATIONS
5	SEC. 15. (a) IN GENERAL.—In addition to amounts
6	authorized under section 6(i) and subsections (b), (c), (d),
7	and (e) of this section, there are authorized to be
8	appropriated—
9	"(1) to the Secretary of the Interior for carry-
10	ing out functions of the Secretary of the Interior
11	under this Act \$110,000,000 for fiscal year 1994,
12	\$120,000,000 for fiscal year 1995, \$130,000,000 for
13	fiscal year 1996, \$140,000,000 for fiscal year 1997,
14	\$150,000,000 for fiscal year 1998, and
15	\$160,000,000 for fiscal year 1999;
16	"(2) to the Secretary of Commerce for carrying
17	out functions of the Secretary of Commerce under
18	this Act \$15,000,000 for fiscal year 1994,
19	\$20,000,000 for fiscal year 1995, \$25,000,000 for
20	fiscal year 1996, \$30,000,000 for fiscal year 1997,
21	\$35,000,000 for fiscal year 1998, and \$40,000,000
22	for fiscal year 1999; and
23	"(3) to the Secretary of Agriculture for carry-
24	ing out functions of the Secretary of Agriculture
<b>2</b> 5	under this Act \$4,000,000 for each of fiscal years

1994 through 1999.

- 1 "(b) EXEMPTIONS FROM ACT.—There are authorized
- 2 to be appropriated to the Secretary of the Interior for car-
- 3 rying out functions of the Secretary of the Interior and
- 4 the Endangered Species Committee under section 7(e),
- 5 (g), and (h) \$625,000 for each of fiscal years 1994
- 6 through 1999.
- 7 "(c) CONVENTION IMPLEMENTATION.—There are au-
- 8 thorized to be appropriated to the Secretary of the Interior
- 9 for carrying out section 8A(e) \$1,000,000 for each of fis-
- 10 cal years 1994 through 1999; such sums shall remain
- 11 available until expended.
- 12 "(d) HABITAT CONSERVATION PLANNING FUND.—
- 13 To assist in the development of plans under sections
- 14 10(a)(2) and 13, there are authorized to be appropriated
- 15 to the Secretary of the Interior \$20,000,000, which shall
- 16 be deposited into the Habitat Conservation Planning Fund
- 17 established under section 13(b) and which shall remain
- 18 available until expended.
- 19 "(e) PRIVATE ASSISTANCE.—There are authorized to
- 20 be appropriated to the Secretary of the Interior for carry-
- 21 ing out section 14 \$25,000,000 for each of fiscal years
- 22 1994 through 1999.
- 23 "(f) AVAILABILITY.—Amounts appropriated under
- 24 the authority of this section shall remain available until
- 25 expended.".



### ENDANGERED SPECIES ACT AMENDMENTS OF 1993

#### TUESDAY, JULY 19, 1994

U.S. Senate,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON CLEAN WATER, FISHERIES, AND WILDLIFE,
Washington, DC.

#### CONSERVATION ON PRIVATE LANDS

The committee met, pursuant to notice, at 9:00 a.m. in room SD-406, Dirksen Senate Office Building, Hon. Bob Graham [chairman of the subcommittee] presiding.

Present: Senators Graham, Reid, Chafee, Faircloth, and

Kempthorne.

### OPENING STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

Senator GRAHAM. I will call the meeting to order.

This is a meeting of the Subcommittee on Clean Water, Fisheries, and Wildlife of the Senate Committee on Environment and Public Works. The subcommittee convenes today in its second in a series of hearings on the reauthorization of the Endangered Species Act. At our initial hearing last month, I indicated that subsequent hearings would be issue-specific. That is certainly true today. This morning, we will focus on conservation on private lands. Because the issues are so contentious, this will be one of the most important of our hearings.

The Endangered Species Acts impacts private property because many of our threatened and endangered species are found there. For example, wetlands provide habitat for almost half of our listed species. Nearly 70 percent of wetlands are privately owned. We simply cannot protect species on public lands alone. What we ultimately face is a tension between private and societal interests. On the one hand is the understandable desire of property owners to use their property as they wish; on the other is the societal desire that other species who inhabit that same property be allowed to

exist.

At our last hearing, we were told that this Act had too many sticks, not enough carrots. It fails to provide economic incentives for our citizens to choose to protect species on their lands. In fact, some contend it does the opposite, creating perverse economic incentives for private landowners to destroy listed species and their inhabitant. Today, we will learn about possible economic incentives, including tax break subsidies and market trading designed to

encourage private landowners to support the existence of a listed species on their property. Others will tell us that we need to foster habitat protection of an ecosystem basis and that we need to establish habitat conservation plans that encourage both public and private involvement.

This morning we will also hear from two property owners—one from California, another from Texas—whose stories are different but represent some of the frustrations felt by many small property owners when they come in contact with the Endangered Species Act. This hearing will not resolve the particular circumstances that brought them here. For example, one of our witnesses lost his home in a California wildfire. The committee just received a General Accounting Office report that concludes that there is no evidence that the Endangered Species Act led to the loss of the home. Clearly, not everyone would agree with that conclusion, but for our purposes, the story is compelling because it is illustrative of the tensions that can be created between those who would protect a species and those whose property is impacted by that protection.

As the subcommittee responsible for the reauthorization of this Act, it is important that we hear about real problems. We also must understand how the Act is intended to work and what possible solutions exist that could improve the Act. We have structured this hearing so that one panel will focus on conservation on agricultural lands. The other will have more of an urban focus.

Before we begin with the panels, however, we are privileged to have with us this morning Members of Congress who care deeply about the impact of this Act on private property owners. We look forward to their testimony.

I would now call upon my colleagues who are here for any opening statements they might have, starting with the ranking member of the subcommittee, Senator Chafee of Rhode Island.

## OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator Chafee. Thank you very much, Mr. Chairman. I look forward to this hearing today and appreciate the witnesses that are here. I have a statement I would like to submit for the record.

Senator Graham. Without objection, so ordered.

Senator CHAFEE. I would just want to end up with one of the concluding paragraphs.

As we consider the economic consequences of conserving species, we must remember that there are also severe economic consequences that go with extinction of these species.

In other words, we always concentrate on what it costs to save these species. There is a cost involved if the species is extinct.

More than half of all medicines today can be traced to wild organisms. Biological resources are important to the development of hybrid crops for farming as well as to other economic activities including fishing, hunting, and tourism.

Mr. Chairman, I look forward to this hearing. I think the Endangered Species Act can be improved, but also I think it has had some splendid achievements during the course of its existence. Thank you, Mr. Chairman.

[Senator Chafee's statement follows:]

### STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Today, we meet to consider the issue of the conservation of endangered species on private lands. This is an issue that has received a great deal of press coverage—unfortunately much of the coverage has shed more heat than light on the issue. This hearing provides an opportunity to focus on the facts rather than the rhetoric and to consider possible solutions that will work both for wildlife and people.

The Endangered Species Act has a great deal of flexibility that is only now, under Secretary Babbitt's leadership, being adequately explored. He, and a number of other witnesses here today, are finding ways to make the Act work while minimizing its impact on private property owners. Whether it is through habitat conservation planning efforts in communities from California to Florida; working with private companies like International Paper who will testify today, or expanding the use of the section 4(d) rule for threatened species, creative people are finding solutions that sacrifice neither the well-being of the economy nor our endangered natural resources.

This is not to say that the Endangered Species Act cannot be improved. The reauthorization bill that Senator Baucus and I introduced—S. 921—encourages private landowners to conserve endangered species by setting up an incentives program for

private property owners to encourage species conservation on their land.

Our bill would also allow landowners to obtain a conservation planning permit for species that are candidates for listing, before the species is listed. These provisions reward private landowners who take early action to conserve declining species. I'm sure we will hear many other ideas on how to improve endangered species conservation on private lands.

As we consider economic consequences of conserving species, we must remember that there are also severe economic consequences to extinction. More than half of all medicines today can be traced to wild organisms. Biological resources are important to the development of hybrid crops for farming as well as to other economic activities including fishing, hunting and tourism.

We need to be mindful both of private property rights and our need to protect the natural resources upon which we all depend. This is not the time to undermine protection for our vanishing species, but to find more efficient and effective ways to conserve them.

Senator Graham. Thank you, Senator. Senator Faircloth of North Carolina.

### OPENING STATEMENT OF HON. LAUCH FAIRCLOTH, U.S. SENATOR FROM THE STATE OF NORTH CAROLINA

Senator FAIRCLOTH. Thank you, Mr. Chairman. I thank you for your willingness to hold hearings this year on the reauthorization

of the Endangered Species Act.

I have spent my life in agriculture and I understand the value of wildlife and I've grown up with it all of my life. But also as a farmer I understand the incredible burden which has been placed upon property owners and others to meet the mandates of this Act. I certainly was not here when Congress passed the Endangered Species Act. In fact, neither was the Chairman or anyone else on the Committee. But I can understand why most Senators voted for the bill. Voting against a law that protects animals is like voting against apple pie, goodness, and Motherhood. Everyone loves animals.

The problem, Mr. Chairman, comes when the bureaucracy gets out of control—and it is out of control—and we hurt people in order to protect animals. That is precisely what is happening all around the country. For instance, in North Carolina we have thousands of

acres of valuable timberland, most of which has been in families for generations, but which cannot be cut because the Fish and Wildlife Services believe it might have the red-cockaded woodpecker. Literally thousands of acres have been set aside. People who have paid taxes on their property, without any "taking", vast acreage has been set aside and they simply cannot cut it or even go near it. People who have owned land for generations are not allowed to use it. By any reasonable measure, the Government has seized the trees without compensation.

Unfortunately, the bureaucracy and the environmental interests do not care about the realities outside of Washington. In fact, they aren't even aware of the realities outside of Washington. They prefer to use the Endangered Species Act and the animals themselves as a tool to create de facto Federal land use regulations nationwide. That is the ultimate goal. The ultimate goal being to create thousands of overlapping habitat ranges for each and every bug, snail, and fly the bureaucracy thinks we need more of, all at the expense

of local Government and private landowners.

Each of the so-called habitat conservation plans will surely come with their own bureaucrat for life to dole out specially tailored permits telling citizens what they can or cannot do with their own land. The Congress has given the species bureaucracy incredible authority. It can mandate virtually any measure to prevent any kind of harm whatsoever to each and every endangered species no matter how slight its difference is from other relative species and regardless of the cost to communities and families. There is no regard for cost. That kind of power is frightening and we have given it to the bureaucracy.

The unfortunate thing is that much of the regulation is counterproductive. Common sense says the incentive is becoming stronger and stronger for landowners to avoid endangered species at any cost. In some cases, that means that people will cut timber prematurely so that it does not have an opportunity to become a habitat for woodpeckers or owls. In all too many cases, it means that people will shoot, shovel, and shut up. The bottom line is that we are pitting landowners against animals and that is wrong. That

was not the purpose.

Mr. Chairman, like I said, everybody loves animals. But at some point we must face common sense and realize that each and every slight genetic difference of animal and plant cannot be protected regardless of cost. I thank you.

Senator GRAHAM. Thank you, Senator.

Senator KEMPTHORNE OF IDAHO.

## OPENING STATEMENT OF HON. DIRK KEMPTHORNE, U.S. SENATOR FROM THE STATE OF IDAHO

Senator KEMPTHORNE. Mr. Chairman, thank you very much. I appreciate that you are scheduling these hearings. I think they are very important. I also want to commend you on the list of witnesses that we will have today because I think it is going to help us to begin to really see the full picture of the Endangered Species Act and the areas where we do need to make modifications.

I could share many examples where the Endangered Species Act has imposed hardship on private property owners. But I will use

the recent experience of the Dworshac Reservoir draw down which I think crystallizes what is wrong with the Endangered Species Act. The Dworshac Reservoir is in northern Idaho near Orafino, the heart of timber country. With access to timber becoming more difficult, the community sought to diversify its economy. The reservoir was built with a specific objective of providing for recreation and economic development in the area.

As we sit here today, the plug is being pulled on that economy because a Federal agency is pulling the plug on the reservoir. Seven marinas will be high and dry with no way to launch boats. The State park and campground will close because the pumps that

supply their water will no longer work.

So why is the reservoir being drawn down? The National Marine Fisheries Service says the draw down is needed to save the endangered salmon. But at best, scientific studies are inconclusive about whether the draw down will save salmon. Respected biologists say the rate of the draw down creates an unhealthy condition for the salmon. The salmon aren't the only fish at risk through the draw down. There are confirmed reports that the draw down is killing thousands of kokonee on a 10-mile stretch of the river. Local residents are counting dead kokonee on the riverbanks. Of interest is that the kokonee are the base food supply of the bald eagle.

I met with a man in charge of the program and he cannot look me in the eye and tell me that the draw down will save the salmon. So you can imagine the reaction of the marina owners and other small business people in that area who are about to lose everything when they are told not only is there no assurance that the draw down will save the salmon, it may in fact kill the very species that it is trying to save and it will kill other fish that serve as the food

supply of the bald eagle.

I believe that common sense and good science and consideration of the impact on the human species must be restored to the Endangered Species Act, and that we can deal with it in the full picture. Mr. Chairman, again I appreciate the fact that we're underway with the Endangered Species Act hearings. Thank you.

Senator GRAHAM. Thank you very much, Senator.

You made reference, Senator Kempthorne, to the series of hearings that we have scheduled. I would like to announce that the hearing that was scheduled for August is going to be deferred until September. Looking at the schedule that we have for those 12 days in August, it appeared as if it would be more prudent to schedule this at a time that was not quite as congested as that period will be. So I make that announcement and would like to consult with you as to a date in September that will be appropriate for your schedules.

Senator KEMPTHORNE. Good. Mr. Chairman, I also appreciate the fact that we are going to go and hold these hearings around the country and hear from the very citizens that have input on the Endangered Species Act.

Senator GRAHAM. Senator Reid?

## OPENING STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM THE STATE OF NEVADA

Senator REID. Thank you, Mr. Chairman. I have a short statement that I will put into the record.

Senator GRAHAM. So ordered.
[Senator Reid's statement follows:]

STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM THE STATE OF NEVADA

I thank the Chairman for holding this hearing today to elicit testimony on one of the most controversial aspects of the Endangered Species Act. The taking issue, and the effects it can have on large and small landowners pits society's desire to protect endangered species against society's desire to protect individual property rights.

Programs such as the Habitat Conservation Plan can mitigate the sometimes harsh effects that compliance with the provisions of the Endangered Species Act can have on landowners. While I understand that the cost of planning and implementing this option is substantial, I am nonetheless encouraged by the 100 or more plans

currently working or being planned.

Finally, I look forward to hearing testimony about other incentive plans such as the Critical Habitat Reserve Program, the Credit Trading Program and the Tax Credit approaches.

Once again, I thank the Chairman for his diligence and leadership in this impor-

tant area.

Senator GRAHAM. We have for Panel I two distinguished Members of the United States Congress. First, our colleague, the senior Senator from the State of Idaho, Senator Larry Craig.

# STATEMENT OF THE HON. LARRY CRAIG, U.S. SENATOR FROM THE STATE OF IDAHO

Senator CRAIG. Chairman Graham, thank you very much for scheduling these hearings. I think all of us are appreciative of the effort of this committee to move toward the reauthorization of the Endangered Species Act with as broad a base of understanding of its values and its problems as you can gain through these hearings.

Let me also recognize the ranking member Senator Chafee and his dedicated effort on behalf of the environment. I respect him highly for that concern and dedication over the years. Also to Senator Faircloth who has been an outspoken advocate of his interests and the interests of his State. Many of those I agree with and I think they are an expression of frustration that has come out of the years of trying to deal with the Endangered Species Act in a reasonable and effective way only to have that not work in many instances in the way many of us would like to see it work.

Also Mr. Chairman, let me thank my colleague Senator Kempthorne for his leadership on this committee, getting the committee to Idaho. We think it is very important to have hearings in a Western State that is of the nature of many Western States where public land policy can be very dominant over private land and private land values. Those will be some of the comments that I will make this morning to the committee on behalf of Idaho and

private property owners.

I also want to thank Senator Kempthorne for bringing to this committee a slide show overlay that you have seen that really demonstrates what can happen in a State or in counties of a State that

are largely dependant upon the public land resources, and then to see one management plan after another for different species of plants and animals that are threatened and/or endangered stacked upon each other and, finding themselves in conflict, render the managing agencies into almost absolute gridlock which results in no economy and the lay-off of hundreds of our citizens. That is a problem with this Act is the inability to incorporate and develop a system of management that accommodates all management schemes in a multitude of species instead of singular management

plans stacked one upon another.

But for a few moments this morning I would kind of like to take off my hat as a Senator from Idaho and put on my hat as cochair of the Private Property Caucus here in the Senate that I cochair with Senator Heflin. We have created this caucus for the purpose of developing a broader understanding of the impact that public policy has on private property, its owners and the rights of those owners to manage those resources, and what we might be able to do about it. As we examine public policy, as we create public policy, what impact will it have, or should it have, on private property, and, like in the efforts of the Federal mandates legislation that my colleague from Idaho is involved in, should there be a method of measuring or attempting to measure how public policy impacts private property, its owners, and the rights and values that those owners have in that property. Those are all going to be terribly important issues.

But also, Mr. Chairman, let me say that I would not vote for the abolishment of the Endangered Species Act. I do believe it has played an important role in this country of sensitizing us to what we do on our lands and in our ecosystem. As humans with the God's gift of intelligence, we ought to be able to manage ourselves in such ways that we can live in most instances in compatible har-

mony with our environment.

Last week I hosted a grazing hearing in South Idaho. Several hundred farmers and ranchers and environmentalists came out to talk about Secretary Babbitt's grazing proposals. The one thing that was obvious there, and it was a dominant theme throughout that hearing, was Mr. Secretary and Senator, don't give us a grazing scheme that is political. Give us a grazing scheme that is based on science and, if you give us something that is based on science, we will work with you. That has been the history of private property owners and interests that associate themselves with public land resources. Give them the sound science and they will work to do everything they can to accommodate while at the same time maintaining their economy.

In my opinion, that has been a gaping hole in the Endangered Species Act. That sound science or manipulated science or science without a responsible peer review has often times produced decisions and management plans that have vast impacts on private properties and individuals without a necessary and important understanding and good common sense that is often times applied

outside the beltway but is lacking inside the beltway.

I would ask unanimous consent that the entirety of my statement be entered into the record. But let me close with a couple of examples that I think are terribly important as we discuss private

property today and you hear from some of the victims of the Endangered Species Act where it overlays private property and has

taken away what they view as their rights.

First of all, I think it is important, Mr. Chairman, that this Congress reawaken itself to what our Founding Fathers believed is the responsibility of our country as it relates to private property. I think our Constitution speaks well to that when it suggests, if it does not imply directly, that private property should not be viewed as something attached to a private citizen which can be arbitrarily taken away, but is an extension of the private citizen, it is the whole of the private citizen, his or her property.

We now see States for the first time moving aggressively to pass legislation that reaffirms that very right. There will be legislation on the ballot in Arizona this year that not only extends the private property but also personal property as the right of the citizen that the State cannot arbitrarily or capriciously take away without just compensation or pass legislation that is blind to the issue of private

property.

If this Congress believes that it can walk away from this issue, it is my suggestion that it is blind to what is going on outside the beltway today. There is clearly across this country a renaissance in the feeling that the Federal Government is taking in one form or another, both subtle or direct, the rights of the private property owner. That movement is large and getting larger. You will see on a State-by-State basis, as we have seen with other issues in the past, this kind of legislation move.

With respect to the salmon issue in Idaho or the Pacific Northwest, the Bonneville Power Administration alone will spend over \$350 million this year and it has spent \$100 million a year for the last 10, so that's \$1 billion-plus already and yet we have not solved that problem. The ratepayers are now paying that. The cost of operations of businesses and private property has gone up and that

cost gets inflicted.

But in closing I would cite the last, and probably best, example occurred in our State a year ago when it was determined by the U.S. Fish and Wildlife Service that a small, almost microscopic snail known as the Bruneau snail was endangered. It was alleged to be endangered because the farmers and ranchers of that very rural isolated county were drilling wells and depleting the aquifer and, therefore, they were throwing this microscopic snail that lived in warm spring areas into danger. I did not believe that was the case, and we found prior to the filing and then again after the filing that the science underlying the study of the aquifer and the water sources themselves had been misread, if not politically manipulated. But the listing went forward anyway. It was a political agenda; it was not a scientifically based action.

As a result of that, that small community rallied. They had to rally because the Farmer's Home Administration had said they would discontinue the loans to the operators and therefore they would not allow the money to go forward to turn the pumps on in the summertime for irrigation. If that were to occur, thousands of acres of property would be returned to desert-like environments.

The average rainfall there is 10 inches a year.

I and Senator Kempthorne and others rallied with the farmers and ranchers in that area. We held fundraisers and baked food sales. We went down there to help them in what was known as a snail race, a charity effort to raise the \$60,000 that the lawyers used to take the Federal Government to court. They took them to court and they won. They did not win based on the science, they won based on the misapplication of the procedures, but they

stopped the Government in its tracks.

They are now preparing to take them on based on science because our State water department and others, including the National Geological Survey, have now come forward and said, yes, the science was either manipulated or misinterpreted, it is inaccurate and current activities are not depleting the aquifer and the snail is not in danger. That battle will go on, but that very rural community has dug deep into their pockets to save their property based on a political agenda it would appear by an agency who was

pushed there by a law suit from an environmental group.

Mr. Chairman, you have been very generous in allowing me to take time. But that is a growing concern in my State. Westerners, but not just westerners anymore, and now most private property owners that are outside the confines of urban environments are increasingly feeling themselves threatened in what is either the value of their property or even the right to claim it and own it based on public policy that sometimes subtly and sometimes not so subtly, as I think you will hear today, can take from it the values that were inherently there prior to a Federal policy being formed and enforced. Those are the issues that are critical.

I would hope as we reauthorize this Act that we hold up a matrix that has private property as a value test that we run our legislation through to make sure that we are sensitive to and that we insist that agencies are sensitive to the test that would result from legislation that suggests that private property is in fact a Constitutional right and is in fact an extension of the private citizen. Thank

you, Mr. Chairman.

Senator Graham. Thank you, Senator. Congressman RICHARD W. Pombo of California.

## STATEMENT OF HON. RICHARD W. POMBO, U.S. REPRESENTATIVE FROM THE STATE OF CALIFORNIA

Mr. Pombo. I would like to thank the Chairman and the ranking member for inviting me to testify at this hearing on the Endangered Species Act. I am glad to have this opportunity to testify on what is probably one of the most important parts of that being its effect on private property and the individual property owners.

I believe that the right to property ownership transcends the authority of both Government and man. The framers of the Constitution clearly recognized this right as they laid out the foundations of the American democracy. It has been reinforced time and time again in the courts. Our Nation's third Chief Justice John Marshall wrote that "The right of acquiring and possessing property and having it protected is one of the natural, inherent and inalienable rights of man." The important element of Justice Marshall's statement embodied in the Takings Clause of the Fifth Amendment is

that such a right includes the guarantee of a reasonable amount

of autonomy in exercising the use of one's own land.

Therefore, when the Government places restrictions on a landowner, as it often does in the name of the Endangered Species Act, it has a responsibility to ensure that such laws are equitable and that the public benefits derived from the listings of a species are paid for by the entire public and not shouldered by a few whose only crime is that they own the property.

I understand the concerns of these small landowners because I am one of them. Before coming to Congress, I made my living as a rancher on a small, family-owned and operated farm and ranch in Tracy, California. Like many who have made their living by ranching, my life has been shaped by the traditions and values associated with proper stewardship of the land. Lately, though, the

tradition is under attack.

In 1986, the Federal Government declared my land critical habitat for the San Joaquin Valley kit fox. This Action effectively stripped my property of its value and forced my family to operate our ranch with an unwanted, unneeded, unsilent partner—the Federal Government. That is why I started a grass roots property rights organization in California and that is why I decided to run for Congress. While campaigning for my seat, I was greatly encouraged to find that far from being alone on this issue, I was part of

a growing American movement.

At this hearing and at future hearings, Congress will be listening to the stories of other property owners, people like me to who have experienced first-hand the regulatory misuse of the Endangered Species Act with its devastating consequences. No responsible person is opposed to protecting truly endangered species—and I want to be clear about that point. I believe their protection is necessary and does provide a significant public benefit. I also believe, however, that as our Government takes steps to protect certain species, our rights as property owners need not be sacrificed. This does not have to be an either/or debate. We can meet our responsibilities to the environment without degrading or undermining the rights of property owners.

By using the expansive regulatory authority set forth in the Endangered Species Act, the Federal Government has the ability to control and manipulate vast amounts of properties at no cost to itself. These powers strike at the heart of historical and Constitutional principles, specifically, the values embodied in the Fifth

Amendment.

It is also important to understand the very real possibility of a public backlash against legitimate environmental activities should the heavy-handed approach of the present Endangered Species Act not be reformed. We must not forget that the strength of this country is based not only from our natural environment, but also from our rich diversity of our people. The rights and privileges of owning a piece of property represent a major step toward the fulfillment of the American dream. It is this dream that draws people of all races, creeds, and colors to our shores, such as my grandparents from Portugal. We must also recognize that it is equally important to conserve our Nation's diverse species population. These interests represent two sides of the same coin. Yet, the continued pitting of

these two interests against each other will only serve to damage them both.

This issue requires a search for balance. I am committed to working out a reasonable approach that I can and firmly believe will produce win-win results. We all have ideas about how to achieve that balance. Senator Baucus and Senator Chafee have collaborated on a legislative proposal that they believe is the best approach to reform the Endangered Species Act, and I thank you both for that. Secretary Babbitt, who has the ultimate responsibility of implementing the Act, has also indicated the need for reevaluation of this Act's implementation. I have my own proposal, H.R. 3978, as do a number of my colleagues on both sides of the aisle. While we may have different ideas on how to reauthorize this Act, we can all agree that reform is necessary. I hope that the House will follow the lead of this subcommittee and continue the much-needed process this year as was originally scheduled.

To conclude, private property rights are at the core of our national heritage. This was once again reaffirmed on June 24th by Chief Justice Rehnquist in his opinion in the case of *Dolan* v.

Tigard. The Chief Justice stated,

One of the principal purposes of the Takings Clause is to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.

As we move to reauthorize the Endangered Species Act, we must uphold the unalienable rights of the property ownership. The Takings Clause of the Fifth Amendment is as important a component of the Bill of Rights as the First Amendment right to freedom of speech or the Fourth Amendment protection against unreasonable search and seizure. If we allow any of our Constitutional rights to be diminished, then we are all less free. As Members of Congress, we swore to uphold the Constitution, the whole Constitution.

I look forward to working with all interested parties in forging a reasonable approach to reforming the ESA. I thank you again Mr. Chairman for holding this hearing, and I look forward to working with you in the future in a truly honest debate on the merits of the reform proposal.

Senator Graham. Thank you, Mister Congressman.

Are there any questions of the Senator or the Congressman?

Senator Chaffee. Mr. Chairman, there is no question as we get into the Endangered Species reauthorization that inevitably we get into the whole takings situation. The takings situation is not solely restricted, obviously, to the Endangered Species Act. We have discussed it on the floor, as Senator Craig knows and others. The courts, as has been pointed out in the testimony of both of these distinguished witnesses, have spoken on this frequently, most recently Judge Rehnquist.

I see the problem I think as the desire for the benefit of the whole as it affects an individual; in other words, the individual property owner. Maybe we ought to have the kit fox, but to preserve the kit fox the burden falls on Congressman Pombo's family's land. The question is, should they bear that burden? This is a very, very difficult question it seems to me. It arises, if you start I sup-

pose at the most fundamental point, on local zoning.

Let's say I lived next to Senator Craig and somebody offers me a lot of money to put a gas station on my land. Senator Craig has a nice house next door and he is not very happy to have a gas station next door. Now, am I entitled to have a gas station? If I am not, should the local community pay me because they have deprived me of the value of my land? I don't think we would agree with that. I think we agree that local zoning is perfectly permissible even though it deprives me of the value of my land. I may get a lot more money for my land if it were not zoned residential but was zoned commercial or industrial. But we accept that.

You try to figure now, is this fair? I don't know the answer. I suppose sometimes you hear the answer, well, that's all right because the locals have had a hand in this. What would be your answer to that problem, Senator Craig, in the local zoning situation, which seems to me is right back in the local community and we all recognize it. I don't think any of us would say you can't have local zoning. I live next to you and my land is zoned residential but I

don't like that, I want a gas station.

Senator CRAIG. Well, in the case of your example, Senator, my guess is that if my home was in a residential section and a business person came in to put a gas station there, zoning would already have occurred and it would be zoned residential and he would not be allowed to. If it were not zoned and it were an open area unzoned, then that individual has recourse in the courts. I think the circumstance that we're involved in here is an oftentimes after the fact situation. It is like the person who moves in next to the airport and then wants to shut the airport down because they don't like the noise. We know what the courts have said about that.

In Idaho recently, which was a landmark case a couple of years ago, we had that happen beside something that the Congressman knows a little bit about, a cattle feed lot. Somebody decided to buy some land and build a nice, small development there of about 20 houses and then they decided they wanted the feed lot to move. The court said, "Oh, no. Sorry, you move. You knew the feed lot was there when you came." Now that happened to be in a nonzoned environment. I think most citizens respond reasonably well when they feel that this is at the local level where these decisions are made and there is a reasonable recourse of action. When someone else takes action that in some way causes them damage, they

have their day in court at the local level.

But what we are talking about here in many instances is the subtleties, the subtleties of one law piling on another that begin a progression of restrictions in one name or another that tie the hand. As I mentioned in my testimony, whether it is a private person using public resources or a public policy inflicting on a private person, in most instances, when it comes to the environment and animals and plants, the answer is, show me the science and let me cooperate and work with me. Don't come in and lay something down on me and say you no longer can ranch here, because most ranchers know that is never quite the truth. You can probably save the kit fox—we saved the curlew on my ranch in Idaho when we were told we had a curlew nesting area by simply grazing it a little less during the period of time that the curlew was inland nesting. We didn't have to have it filed as an endangered species because

the BLM worked cooperatively with us in a different grazing management scheme instead of coming in to lay the heavy hand of Government down and say get off the land, restrict yourself from the land, an endangered or threatened species is there.

So there are a variety of approaches, but the one that most private citizens will react to is when the heavy hammer of the Government is laid down and there is no compensation and no basis of understanding in a cooperative nature or a cooperative approach

Senator CHAFEE. Mr. Chairman, I see that my time is nearly up. I want to thank Senator Craig. This is a difficult problem, there is no question about it. Obviously many people here have had unfortunate experiences with the Endangered Species Act. If our statistics are right, it is my understanding that the number of problems that have arisen for the number of consultations that have started out is really very, very small. One statistic I have is only one tenth of 1 percent of the projects are actually halted.

In any event, this is very helpful and it goes much beyond the zoning. Let's say I have a ranch next to Senator Craig's. I would like to have a toxic waste dump on it, make a lot of money that way. I am informed that I can't do that. Now what happens? The Government tells me I can't have a toxic waste site. Are they to pay me some money, the difference between what my land would be worth with a nice attractive, if that's not a contradiction in terms, toxic waste dump on it? I don't think we would say so. I think we recognize the Government has that authority to tell us no, we can't do that. But these are the kinds of difficulties that

arise. I am glad both of these gentlemen are here.

Mr. POMBO. If the Chairman would grant me the right to respond. I would like to. I think a more accurate description of what is currently happening with ESA in terms of banking it against the way we do local land use planning would be more accurately described as, to use your example, that you have a gas station in your home State that you have operated for four generations and Senator Craig from Idaho would reach out and decide that the site that your gas station is located on would be a great place for a park. He would introduce legislation at the Federal Government level which would put you out of business and say that you could no longer operate a gas station on that site. Then over several years, as your property devalues because you can't put it to its current use, then the Federal Government would step in and buy it at a much reduced price and implement the plan that Senator Craig started 20 years before that. That is more accurate as to what is happening now.

I hear the example of a toxic waste dump being thrown up many times. That is why we have local land use decisions and local Government making those decisions, because they are in a much better position than Congress to decide the location of things like gas stations or toxic dumps or ranches or farms or anything else because they have to live in those communities. One of the problems that we're having right now with ESA is I guess the underlying agenda of what the Endangered Species Act is being used to accomplish. It is not just to save endangered species; it is also to control land

use at the local level.

Senator GRAHAM. Thank you. Any other questions?

Let me ask a question. A statement that one of the witnesses made at last month's hearing was that no court has ever found that the utilization of the Endangered Species Act constitutes a taking of private property. Are you familiar with any cases in which a court has found that an action taken under the Endangered Species Act constitutes a violation of the Fifth Amendment?

Senator CRAIG. Mr. Chairman, to my knowledge, to date there are none. I think there is a good explanation for that. In most instances, it is a complicated procedure and it is very, very costly. In most instances, private property owners don't have a lot of ready cash. That is why I used the example of the Bruneau hot springs snail. That community individually did not have the \$60,000 to \$100,000 to try it in the court. So they spent 4 months raising money statewide and in asking their Senators to help out. I think we are on the threshold though of seeing many of those kinds of tests come. We are now seeing, as Congressman Pombo mentioned, decisions here in the court with the Tigard decision and others that this is finally welling up.

Most citizens are very sympathetic to the intent of the Endangered Species Act. They are very resistant to step out. But it is when they are so damaged that they have to that they are finally coming forward. In our State alone, I think you will see many of these kinds of tests being brought in the next several years. Right now, it appears the courts are moving in the direction of recognizing the private property owner and trying to find their way through the measurement of damage or a taking. But I am sure

it has been the cost.

The reverse, many of the groups who have brought the suits toward an Endangered Species Act are groups of large and substantial means and have had their own in-house attorneys that can fund these kinds of things. They have a broad national constituency to raise money from. The private property owner has not been

that kind of an individual.

Senator FAIRCLOTH. Mr. Chairman, I so agree with Senator Craig. Unless you have gone head-to-head with the U.S. Attorney's Office, you don't know the depth of the problem you are facing and the amount of money you are going to have to come up with to even begin to be an equal foe. So when you go, as you well said, against the U.S. Government, oftentimes the property isn't worth enough to justify the case. Wetlands violation can be \$25,000 a day-a day. That will absorb most farms pretty quickly. When you live in an area with 50 inches of rainfall annually, you have got a lot of wetlands and so you can get in trouble quick.

Senator Craig, I had one question. If you lay all the habitat zones out on top of each other in Idaho, different habitat protec-

tions, how much of the State wouldn't be in a habitat zone?

Senator CRAIG. Would you repeat that last part. Senator FAIRCLOTH. If you took all of the various endangered species that they have created habitat zones for, would there be

any of Idaho out of a habitat zone?

Senator CRAIG. At this time, no. No one inch of Idaho ground is now out of a habitat area. It was true up until we had filings on species of salmon in the Snake and the Columbia system. Now Idaho, because it is in the Columbia-Snake River watershed, every acre of ground is watershed and ultimately a tributary of the Snake or the Columbia River systems. So there is now not one acre

of ground outside of an endangered species habitat area.

Senator FAIRCLOTH. Senator Chafee made a very good point and a very valid point, and Congressman Pombo answered it. But there has to be common sense involved between local zoning and what you can do to destroy your neighbor and taking the entire State of Idaho and putting it under Federal controls. There is something between building a waste dump beside your neighbor's house and taking an entire State and putting it under Federal control, and that is exactly what we've done with the State of Idaho. Thank you.

Senator REID [assuming the chair]. Senator Kempthorne, do you

want to say anything?

Senator KEMPTHORNE. Yes, I do, Mr. Chairman, thank you. Senator Craig, we hear the argument that the private property rights issue is a false argument with regard to the Endangered Species Act because of the lack of numerous litigations that are taking place concerning this issue. Do you feel that is an accurate meas-

ure? How do you respond to that?

Senator CRAIG. I don't think that is an accurate measure at all. As I mentioned a few moments ago, Senator, and Senator Faircloth mentioned it, what we are talking about is asking the private property owner in protection of or defense of their property to enter into a very expensive proposition. There is an illusion suffered in this country that if you are an owner of land you have great wealth. It entirely depends upon the type of land. You may have a ranch that on the books is worth a million dollars but it doesn't cash flow anything. It isn't of value to you until you sell it. You may be able to eke a living out of it raising cattle on it or some livestock, and some years you may make a fairly good living. But on average, you are probably receiving less than 2 percent return on your investment. There isn't a business person out there that wouldn't call that a pretty bad investment.

So should the Federal Government force a private property owner in defense of his or her property to place the whole property at jeopardy? No, they shouldn't. So what has happened, until they have been able to work with Mountain States Legal Foundation and Pacific Legal and others who can pool resources, is they have simply hunkered down and not filed. Of course the example I mentioned in Idaho, the community finally said we have had enough. This ruling will put the entire county out of business. They rallied as a group and they formed a nonprofit entity and went out and raised nearly \$100,000. That is a huge task. It took them over a year to do it in a very sparsely populated community where the nearest neighbor is 5 miles from the other neighbor. We're talking about a rural western community in a county that is five times larger than Senator Chafee's home State and yet there are one-one hundredth of the people there or something like that. It is a very

dramatic difference.

So that is why we haven't seen these cases. They are now beginning to come and there will be increasing numbers of them because the courts are beginning to show some element of sympathy or con-

cern or legitimacy to the argument of a taking in the defense of pri-

vate property.

Senator KEMPTHORNE. Congressman Pombo, why don't you believe that the court system provides enough protection for private property owners who believe that they are victims of a regulatory taking as embodied perhaps through the Endangered Species Act?

Mr. POMBO. Well, for one thing, if someone does have the resources to take it all the way through, any case that deals with a takings issue, no matter who wins at the lower court level, it is going to be appealed. From personal experience, I know that on one particular case where 20 ranchers banded together to fight a Government taking, they put in over \$200,000 in attorneys' fees and went all the way to the Supreme Court and were told at that time that they were basically correct in their assessment but there was another part of the decision that had to be retried and it had to go back all the way through the court system again before the Supreme Court would take it up. The attorneys that were handling that said that would take at least another \$200,000 to get back up to that point and then \$200,000 to go before the Supreme Court at that point. The property owners all bailed out at that point because they didn't have the money to do it. Even though they knew they were right, they did not have the money to take it on.

In a way, I kind of disagree that we are going to see more of these takings cases come up before the courts because I believe that Congress is going to act to change that before it gets any worse than it already has. There are a lot of cases out there that are at lower court levels right now that are working their way through. But I don't believe that Congress can sit back and take the risk that they are going to lose a major decision on a takings issue. I think that they are going to have to start acting now in reigning in Fish and Wildlife and the Department of the Interior to be more responsive to private property rights and to protect private property rights or else we will end up with a situation that

this Government can't afford to pay for.

Senator KEMPTHORNE. Thank you very much.

Senator CHAFEE. Mr. Chairman, this is a summary of the State takings bills that have been introduced in State legislatures in 1994 and in 1993, and if it is inaccurate I would be glad to have somebody point it out to me. One conclusion that could be reached, and that could be contradicted, but one conclusion that could be reached under this is that the takings issue, whereas there are specific instances, as each of you have pointed out of alarming nature, that it isn't such a major problem. That may be a conclusion, I don't know.

But I will just read this briefly. The summary of the takings bills in 1994. In 26 States bills have been introduced. In 19 States, all the takings bills have been totally rejected. In 4 States a takings bill was passed, but of these only 1 State passed a limited compensation bill. Now how can you have a takings bill without a compensation? Some of them were studies of the situation. In 1993, 32 States had takings bills introduced; 28 were rejected, 4 States passed. Of those 4 that passed, 2 of them, Virginia and Florida, were study bills and neither study recommended that takings legislation be enacted. In Indiana and Utah, they passed assessment

bills. What does an assessment mean? The definition I have here is "It provides for the takings impact assessment.", in other words what really happened there.

If either of you gentlemen want to comment on this?

Senator CRAIG. Mr. Chairman, what was the first date you had

there, the first date?

Senator Chaffee. Yes, in 1994, this current calendar year, and 1993. In other words, in this calendar year, 26 States have introduced takings legislation, 19 States have rejected it, and 4 States passed it. The note here is one or two pending bills that are out there still might likely pass. But of those four that have passed, only one State passed a limited compensation bill and that was only for forestry. So I suppose we can all draw different conclusions to this, but one conclusion, as I indicated, possibly is that this problem isn't as big as we think it is. Or, it may be that they have rejected it because they think it should be handled at the Federal level. Obviously we're here on the Endangered Species Act today and not on other issues. But I think that we can get something from this.

Senator CRAIG. Mr. Chairman, let me respond very briefly because we are taking up time and there are some excellent witnesses here. Senator Chafee, let me only make an observation, it is certainly not a contradiction because I don't have those facts, but I have been a State legislator of not too long ago and I kind of have a sense of how these things work. Often times reaction to Federal policy begins at the State level and, while it cannot be directed at the Federal policy, it is more of an expression about it. That is what I think we are now seeing at the State legislative levels that

relates to takings.

Part of the problem, and it is a very real part of the problem, you and I have never yet seen a State legislative budget or a State budget with much surplus in it, and you are talking about a test that has real money tied to it. So State legislators are extremely cautious. That's why you find more study bills passing than you do actual takings language passing. In State law today for utility purposes and State transportation and highway purposes, you have right of condemnation and, obviously, payment. It is built inside the budgets of those agencies so they have dollars to do that. But in the broad sense, beyond those already designated and well-established areas where State Government has the right to take private property for other purposes with just compensation, there is none of that.

A lot of conclusions can be drawn, but I will bet underlying it is a very real concern on the part of a lot of State legislators that while they are very sympathetic to the legislation, they are not willing to put their State's treasuries at risk by legislation that they don't have money to fund if judgments were to come down. So

I think it is a combination of a lot of those things.

I agree with Congressman Pombo on his last statement totally and I think it is reflective in that. We hope the Congress moves but, if they don't, my guess is that this is picking up and very rapidly. You mentioned 1993 and 1994 and that's not past history, that is current history. That is the last legislative year. That tells you a flurry of legislation is moving at the State legislative level

on this issue in the last 2 to 3 years and that there is a ramping up of public awareness of this problem.

Senator REID. Senator Faircloth.

Senator FAIRCLOTH. Congressman Pombo, if you would for the edification of us, would you very briefly describe your bill and how it will impact on what we're talking about.

Senator REID. And if I could just say do it briefly. We are really

running late here.

Mr. POMBO. I will be as brief as I possibly can. The focus of my bill is to change the Endangered Species Act to protect endangered species first and foremost and to protect the rights of private property owners. The focus of listing would change so that all science would be presented at the time of listing, that all sides would have the opportunity to have their science put into the mix at the time of listing, there would be a peer review process at the time of listing, and we would also have a recovery plan adopted at the time of listing so that everybody knows what we're getting into at the point that something is listed. That would probably be the biggest single change in the way the current ESA is being implemented.

Senator FAIRCLOTH. Thank you very much.

Senator REID. The next panel of witnesses will consist of six witnesses; Yshmael Garcia, Bob Buster, Ned Meister, Mark Suwyn, Hank Fischer, and Michael Spear. But as they are coming forward, I would like Congressman Calvert and Congressman McCandless to come to the podium here. It is good to see you, Al. These gentlemen both represent areas that suffered in the wildfires last October, congressional districts 44 and 43. We would ask that these gentlemen introduce Mr. Garcia.

#### STATEMENT OF HON. AL McCANDLESS, U.S. REPRESENTATIVE FROM THE STATE OF CALIFORNIA

Mr. McCandless. Thank you, Mr. Chairman. I really appreciate the opportunity of being able to appear before you, and I would ask unanimous consent to submit my entire statement for the record.

Senator REID. That will be the order.

Mr. McCandless. I will summarize, which I am sure would

please the panel.

We are here today on an extreme problem relative to not only just Riverside County in southern California, but to virtually every area as outlined by our previous panel. I want to preface my remarks by saying I also believe that there is a place in our society for the Endangered Species Act. It is a question of the implementation on a day-by-day basis of that Endangered Species Act, as the panel here today has talked about, and with specific instances as to how this seems to go awry.

In Riverside County, the fire fighting agency has a contractual agreement between the State Department of Forestry and the Riverside County fire department. It is a very professional organization. During the 12 years that I was a member of the governing body of the county, I chaired a group that redid the whole fire ordinance of the county of which a part is the discussion that is going to take place with the representatives here today. We call it, for lack of a better reason, the Hillside Ordinance which said in essence that our experience over the past years is such that we need to address the issue of clearing land around the perimeter of a structure in order to reduce the fire hazard that takes place, whether it be brush, whether it be grass, or whatever it might be.

The problem here today is that in the case of 39 homes there was a conflict between this ordinance which was passed by local Government that set up the procedures—and I might add there were a number of hearings beyond that of the committee to establish the final draft—and the implementation of the Endangered Species Act relative to the clearing of land around dwellings. Unfortunately, Mr. Yshmael Garcia, who is with us today, and a number of his neighbors, both north and south, east and west, became then the victims of this contradiction between the local Government ordinances as enforced by the fire department and the Endangered Species Act representatives of Fish and Wildlife.

I am very pleased that Mr. Yshmael Garcia is able to be with us today because he illustrates I believe as best as anyone can the cost of what it is we're talking about here in terms of the bureaucracy and the heavy-handed implementation of the Endangered Species Act. I use that word heavy-handed because the Endangered Species Act was designed to accomplish certain objectives, all of us I believe would agree, but it has gone awry as the implementation

aspect of it has taken place.

Mr. Calvert, to my left, and I spent quite a bit of time on site during the mop up period of the fire in question last October both in a helicopter and on the ground with the Fire Chief, Mr. Harris of Riverside County who is a Department of Forestry employee acting as Fire Chief, along with many of the other professionals. It was without question that we found in more cases than I would like to think that if there had been a clearing of some 100 feet, it would have reduced substantially what it is that unfortunately Mr.

Garcia and his neighbors experienced.

I have nothing but respect for the GAO. They are a very professional organization and I have worked with them on a number of issues. But I must say when the report was brought to my attention, I wondered if they were talking about the same fire that I and my colleagues were involved in in the mop up and then the review and the activities that took place later on in terms of what can we do to reduce this in the next situation and so forth. I must say, and we will submit to the committee, records showing the contradictions here between the implementation on the ground, that administration in an office, and then the post-fire policies of Fish and Wildlife relative to the endangered species which are completely contradictory to the original position that they took.

Thank you, Mr. Chairman, for your time. We in Riverside County in California, the gentlemen here, many of them also are residents and elected officials, feel very strongly about the Endangered Species Act and the fact that it has a place in our society. But we also feel that Endangered Species Act should be representative of a workable arrangement between the parties involved that experience what it is the ultimate decision is going to be. I thank the Chairman for giving me the time to speak, and look forward to the

testimony of our panel.

Senator REID. Thank you very much.

Congressman CALVERT.

#### STATEMENT OF HON. KEN CALVERT, U.S. REPRESENTATIVE FROM THE STATE OF CALIFORNIA

Mr. CALVERT. Thank you, Mr. Chairman, for allowing me to be here today. I will be brief. I would ask unanimous consent that my entire statement be submitted for the record.

Senator REID. That will be the order.

Mr. CALVERT. There is an old story I am sure many of you have heard. It is about an attorney fresh out of law school trying his first case. During the cross-examination of a witness, he pointed to a man in the courtroom and asked the witness: "Did you actually see my client bite off that man's ear?" The witness said, "No, sir, I did not." Rather than stop while he was ahead, the attorney then asked, "Well, how do you know that my client bit off his ear?" To which the witness replied, "I saw him spit it out."

Law professors use that story to teach their students not to ask questions to which they don't already know the answers. It also has another message for people conducting Government studies only ask the questions that you know will evoke the answers you

want to hear.

That is recently what happened when the GAO conducted a study of the 1993 Winchester fire in California. They only asked the questions they knew would evoke the answers that would prove their preconceived conclusions that the rules generated by the Endangered Species Act did not cause loss of property. Quite frankly, Mr. Chairman, they were smart lawyers for their client but they were not after the truth.

Congressman Al McCandless and I toured the area of the fires the weekend after they occurred and talked to fire fighters, as he mentioned, and I can assure you those rules did cause loss of property. But I don't want you to just take my word for it. That is why I am pleased that Mr. Garcia, one of the homeowners who actually lost his home in the fires, is with you here today. If you ask him, as the GAO asked others, "Can you prove beyond any doubt that the ESA rules caused your house to burn?" he might have to answer, "No." But if you, as the attorney in the story did, give him a chance to tell the entire story, you will probably get a much different answer.

Senator REID. We appreciate both of you coming over here. You are welcome to stay or be excused, whatever meets your schedule.

Gentlemen, we have these timing lights. The green light means you are in the 4-minute period; when it turns yellow it means you have one minute left; and when it turns red it means you are not going to be able to talk anymore. We have a lot of witnesses to go through today and we have questions that we want to ask the panel. So please keep an eye on this and limit your statements to 5 minutes, otherwise we will cut you off. Thank you very much.

We will hear from you first, Mr. Garcia. Following Mr. Garcia are Mr. Buster, Mr. Meister, Mr. Suwyn, Mr. Fischer, and Mr.

Spear, in that order.

#### STATEMENT OF YSHMAEL GARCIA, PROPERTY OWNER, WINCHESTER, CA

Mr. GARCIA. Mr. Chairman, I would like to thank you for inviting me here. I am Yshmael Garcia and until recently a resident of Winchester, CA. I am now among the homeless. The Endangered Species Act is responsible for the loss of our home and everything

we owned on this earth, as well as the near loss of our lives.

My home was located on 27 acres in a rural area of southern Riverside County in California. Our area consists of beautiful rolling hills and small valleys. Our neighbors have farmed these valleys for over 100 years by growing cereal grains on them. I personally have an orchard on my property.

In October 1988, a small rodent known as the Stephens' kangaroo rat, which inhabits large areas in southern Riverside County, was declared an endangered subspecies. The rodent is entirely nocturnal and I venture to say that very few people have ever seen one, and probably most of them have been biologists who have been

studying them.

As a result of this listing, the county embarked on the implementation of the Act. Our area, along with others totalling 84,000 acres, was designated a "Study Area". We were told that any disturbance of the area would be considered a "take" of this rodent and subject to a \$50,000 fine and/or 1 year in jail for each instance. We were forbidden to disturb the soil in any way without having to pay extravagant fees for biological surveys. Various adjacent landowners were forbidden from farming and/or using their timehonored fire prevention practices.

The native plants in our area consist of sage, chamise, and several greasewoods. All of these plants can grow to heights of 6 feet. Over the past 4 years, brush invaded the hills around us and even filled the valleys where our neighbors were forbidden to farm or

clear firebreaks.

When we were stewards of our lands, we lived in harmony with all these creatures and our cereals helped feed them. We also kept the brush in check by cutting firebreaks through it. It is important to say that our area is a high fire hazard area. We had small natural fires every 2 or 3 years which were controllable because of the firebreaks and clearings in the farmed valleys all around us.

On October 27, 1993, a fire caused by a toppled electric wire 7 miles away from us encountered this growth of 7-year-old brush. It roared uncontrollably through our hills and valleys and burned down our home and several other homes. It also destroyed 25,000

acres of the habitat of many species of animals and birds.

When I consider the fact that thousands of these creatures were killed in this fire and that their habitat and their populations may take many years to recover, I can only believe that the Fish and Wildlife Service has embarked on a kind of "Fearless Fosdick" syndrome as concerns these creatures they have decided to protect.

I believe that this disregard for our safety and for the well-documented history of the fires in this area in ordering a "Do Not Disturb" policy was irresponsible and single-minded by the administrators of the Act. Because we lived in a high fire hazard area, we could not buy adequate insurance to fully cover all our property, and our loss is in excess of \$500,000.

My wife, my four-year-old daughter, and I barely escaped with our lives. I recently read in a publication by the Endangered Species Coalition that no takings of private property have ever won a court approval under Fifth Amendment rights and that the alleged conflict between the ESA and private property is all smoke and no fire. Well, gentlemen, it was not smoke that melted the windows of my concrete stucco home with its concrete tile roof. It was fire

that came in and destroyed everything in less than an hour.

This is a taking if ever there was one. Some say that we have the courts to protect people like me. The truth of the matter is people like me can't afford the many years and several hundreds of thousands of dollars it takes to protect our constitutional rights. People like me, the victims of the California fire, need people like you to fight for our rights and not to take them away from us.

We and our neighbors were damaged terribly by the blind and insensitive use of the raw power that this Act has placed in the hands of people for the persuasion to preserve all species whatever the cost. I believe that in a free country, if the public wants to preserve endangered species, private landowners should not be forced to bear the cost alone. The loss of our home and all our belongings

was a terrible price to pay.

The Endangered Species Coalition says there are no victims of the Endangered Species Act. Gentlemen, we are victims. Only you have the power to amend this Act so that human life and personal property are adequately protected. I hope that you will do so. Thank you for listening.

Senator REID. Mr. Buster?

#### STATEMENT OF BOB BUSTER, FIRST DISTRICT SUPERVISOR, RIVERSIDE COUNTY BOARD OF SUPERVISORS, RIVERSIDE, CA; ACCOMPANIED BY BRIAN LOEW, EXECUTIVE DIRECTOR, RIVERSIDE COUNTY HABITAT CONSERVATION AGENCY

Mr. BUSTER. Thank you, Mr. Chairman, honorable Senators. I am Bob Buster, Supervisor from Riverside County's First District. I represent an area in southern California where the Endangered Species Act is on the minds of many people. With me is Brian Loew, executive director of the Riverside County Habitat Conservation Agency, which is a consortium of the County and seven other cities that have the endangered Stephens' kangaroo rat in their areas.

Many of my comments about the California fire and the effect of land clearance rules under the Endangered Species Act on the destruction of homes have already been covered by the GAO report which my office received last Friday. My only significant addition to the findings of that report is that it deals only with high wind wildfires, like the California fire, and the obvious ineffectiveness of

only 100 feet of land clearance in deterring structure loss.

Our County fire officials have told me that such clearance measures were not intended to prevent loss of homes from conflagrations the magnitude of this fire, which was rated in technical terms as a 90th percentile fire. The only certain thing, however, is that there will be more fires in rural areas populated by endangered species and people. Some of these fires will occur in calmer conditions when fires spread more slowly, and saving homes and outbuildings along a broad perimeter could well depend on the complete clearance of buffer areas on suitable terrain by disking. Some fires can move through even mown stubble and burn down homes and buildings and be impossible to extinguish for a resident

equipped with only a garden hose or hand tools. So there are ample reasons for the Fish and Wildlife Service to allow the option of

disking at least 100 feet and more if conditions dictate.

A cooperative agreement to permit this in Riverside, in fact to allow any means to clear land within 100 feet of structures, has been developed and is being implemented in Riverside County in this fire season. As I have recommended in my main comments, there actually needs to be a public safety element and public safety

considerations early on in the habitat planning process.

Now a greater and continuing cause of local criticism is a lack of Federal funding or economic or other tax incentives for this mandate and the heavy local burden of cost. Riverside County established a \$1,950 per acre fee on new development within the historic range of the Stephens' kangaroo rat in December of 1988 to pay for habitat land acquisition. So far, the fee has generated some \$30 million, double that I have indicated in my prepared text. The conservation agency has purchased 6,000 acres with it and, in cooperation with other dedicated lands, now has some 39,000 acres in habitat reserves for the kangaroo rat. But we expect the permanent plan to cost \$56 million. Only \$5 million of that total will be derived from Federal or State sources. There are, however, 40 more species in Riverside County alone which could reach the endangered list.

A cooperative effort between Federal-State-local Governments is essential to the cost and scientific effectiveness in fulfilling the Endangered Species Act. An equitable sharing of cost is critical, not only to provide sufficient funds for the potential cost of land acquisition in rapidly growing areas like southern California, but also to engage public support for the purposes of the Act. It is inherently unfair for species-rich local areas to bear such a high proportion of

the cost as Riverside County is doing.

It also makes sense to reform the Act so that instead of reacting on a species-by-species basis, when only expensive and often futile last minute rescues are possible, early identification and protection of the whole critical habitats and ecosystems can take place. This is the so-called multispecies preservation approach and it is high time to make the changes here at the Federal level to encourage

it locally.

Riverside County, the fastest growing large county in the Nation during the 1980s, has been able through a concerted effort to assemble the plans, funding, and land to protect one species—the kangaroo rat. We have done this with little Federal help. As we confront more species, however, we will need your greater cooperation in a fair share of funding and in changing the law so that it stimulates a preventative ecosystem approach. In this way, we will have the greatest ability not only to fulfill the purposes of this challenging legislation while protecting the rights of property owners, but also to minimize the eruption of such controversies we are talking about today. The best way to allow the business and development growth Riverside County needs without subjecting it to the constant threat of delays and higher fees is to move swiftly in this direction. Thank you, Mr. Chairman.

Senator REID. Thank you, Mr. Buster.

Mr. Meister?

# STATEMENT OF NED MEISTER, DIRECTOR OF COMMODITY AND REGULATORY ACTIVITIES, TEXAS FARM BUREAU FEDERATION, WACO, TX

Mr. MEISTER. Mr. Chairman and members of the committee, my name is Ned Meister. I am the director of Commodity and Regulatory Activities for Texas Farm Bureau headquartered in Waco, TX. Texas Farm Bureau is a general farm organization with pro-

ducer members in most Texas counties.

I appear before you today to offer our views on conservation efforts on private property relating to the reauthorization of the Endangered Species Act. The reauthorization should include four basic principles: (1) protection for individuals' Constitutional right of private property ownership; (2) provisions for compensation when takings occur; (3) a requirement for an economic impact analysis that would determine the feasibility of any listing and/or implementation of regulation; and (4) economic incentives to landowners when Government action is taken.

Today, Government actions are imposing an increasing amount of restrictions on privately owned farms and ranches. Endangered species, wetlands, clean water initiatives, along with other programs are adding costs to production agriculture that can only be internalized. There is no guarantee that the market forces will re-

turn the costs brought about by these actions.

Landowners have experienced or have heard the horror stories associated with the presence of an endangered or threatened species. They live in fear that a listed species or a species that may be listed in the future may be found on their land. They fear that the presence of a listed species will cost them their land, their livelihood, and their dreams. There is no positive incentive for landowners to be encouraged to assist in the preservation or recovery of endangered or threatened species. This is the opposite of the true nature of farmers and ranchers who have a deep appreciation for environmental stewardship, an appreciation that has been the backbone of their livelihood and their way of life.

Today, Texas Farm Bureau suggests to this committee an incentive plan that will help the conservation effort for endangered and threatened species on private land. It is a voluntary plan that will enlist private landowners' help in the conservation effort. The plan provides for economic incentives that would mitigate landowners' economic losses that they currently face. It is a plan that will foster landowners' cooperation and help calm the fear associated with the current Act. History indicates that incentives will do far more to achieve our stated goal of the preservation and propagation of en-

dangered plants and animals.

Mr. Chairman, what we propose to your committee today is a program which is similar to the Conservation Reserve Program operated by the U.S. Department of Agriculture since 1985. The purpose of that program is to protect and preserve highly erodible land. I might add that the CRP has proven highly successful by enrolling farmers in this voluntary program. The Wetlands Reserve Program is another example of a voluntary program that illustrates farmers' willingness to participate in the conservation effort.

The Critical Habitat Reserve Program would consist of a 5-year contract between the Department of Interior and individual land-

owners. As proposed, the contract is subject to renewal as long as the species is threatened or endangered. We would propose that the program be voluntary with producers submitting bids for the approval of their contract just as currently practiced under CRP. Under the proposed contract, landowners would be required to implement an approved recovery plan and restricted from any unspecified use of the property. Periodic inspections by appropriate officials would ensure compliance with the plan. Violation of the plan agreements could result not only in forfeiture of benefits but assessment of penalties as well.

Our recommendation would be that these contracts be for the lease of the property by the Federal Government rather than an easement. The more responsibility individual landowners have, the better he or she can be expected to perform. Obviously, in addition to inspection visits, an oversight responsibility would be necessary. The USDA has a history of providing incentives to producers, and any new program should be coordinated with that agency to best

assure success.

Mr. Chairman, American farmers and ranchers have made this Nation the bread basket of the world, providing its citizens with the most abundant, safest, most inexpensive food supply in the world. With all due respect, if this committee wishes to preserve a species, be it plant or animal, farmers and ranchers with proper incentives can do it. In the interest of time, I have attached a copy of the overall Critical Habitat Reserve Plan for the record. Thank you for this opportunity.

Senator REID. Thank you. I appreciate your testimony.

Okay, Mr. Suwyn?

# STATEMENT OF MARK SUWYN, EXECUTIVE VICE PRESIDENT FOR FORESTRY AND SPECIALTY PRODUCTS, INTERNATIONAL PAPER, WASHINGTON, DC

Mr. Suwyn. Thank you, Mr. Chairman. I am Mark A. Suwyn, executive vice president, Forestry and Special Products for International Paper. I thank you for the opportunity to appear today on behalf of International Paper and present our company's views of the Habitat Conservation Planning process.

International Paper has a long and distinguished history of dealing with endangered species dating back to our early involvement with the red-cockaded woodpecker. Currently, we have 12 federally

listed animals and one endangered plant on our land.

Our involvement in the endangered species management has evolved significantly since the Endangered Species Act's inception. Our early activities centered around land set asides and donations. However, over time we have taken a much more active day-to-day role in endangered species management. This evolution has been in

our experience with the Red Hills salamander.

We own approximately 570,000 acres of forest land in south Alabama, 30,000 of which are within the Red Hills salamander's historic range. In 1977, working with the Fish and Wildlife Service, biologists, and Auburn University scientists we developed some internal company guidelines for the salamander. Using those guidelines, we set aside 7,000 acres that resembled salamander habitat and halted all logging activities in that area.

Over time, as we began to learn more about the salamander, we initiated 3 years ago a cooperative approach with the biologists and the Fish and Wildlife Service to develop an official habitat conservation plan to preserve the salamander in its habitat. We jointly announced the successful completion of that plan with Secretary

Babbitt on November 16, 1993.

About 4,500 acres have been set aside and preserved in its natural condition. The incidental take permit resulting from the ACP allows us to continue forest operations on the other 2,500 acres. The Red Hills salamander HCP we competed was first developed by a forest parks company in the South. It demonstrates a commitment to integrate forestry and endangered species management which we think can be done. We presently are involved in development of an HCP for the gopher tortoise. This plan has a potential

to impact more than 100,000 acres of our land in the South.

Our experience with the HCP process has led us to be both a supporter and a critic of the process. It has been both satisfying and very frustrating. The satisfaction came through the various collaborative steps involving the Fish and Wildlife Service, environmental organizations, the public, and our own staff within our own corporation. As a result of this, there were no lost jobs, no local economies disrupted, and the threatened Red Hills salamander is being protected on our land without conflict, costly litigation, or undue controversy. The frustration came from the outlay of substantial sums of money and the long time it took to complete the

plan. It is a very slow, costly process.

This HCP process as it is currently structured is difficult to the point that it almost automatically excludes about 70 percent of the lands in the Southeast. Most of the lands in the Southeast are privately owned in small tracts by non-industrial landowners. For them, the habitat conservation program is too expensive, confusing, and time consuming. A conscientious small landowner forester who tries to protect endangered species has several unattractive options today. He can spend a lot of money for a habitat conservation program which usually results in harvest restrictions; or he can totally shut down the land where the species exists and completely forego any income while continuing to pay his taxes; or the third course is to pass on both of those and cut his trees before anybody finds out that there is a threatened or endangered species under foot. That is what he is basically encouraged to do by the process today.

We're active members of the Endangered Species Coordinating Council and have been an early supporter of the Tauzin-Fields bill in the House and the Shelby-Gordon bill here in the Senate. All the bills raise the same concerns with the present Act, what is different are the solutions proposed. Our challenge is to find some common ground and build upon it to improve the ESA so it can accomplish the original purpose Congress intended—to prevent species from becoming extinct. We applaud Secretary Babbitt's recent administrative changes to the ESA. The changes, if implemented as described, will be positive changes for the Act and should address some of the issues previously mentioned. However, there is concern that without the necessary changes in the statute, these changes are not very secure. Change the Act to prevent the positive moves

made by Secretary Babbitt from being eroded by subsequent secretaries.

There are two final points concerning the HCP that I would like you to address. First, redefine the Habitat Conservation Plan process to enhance and encourage private landowner participation; and, second, create incentives for proactive management approaches and compensate private landowners when incurring mandated management costs to maintain listed species.

In conclusion, let me just indicate that while the private landowner will benefit from that, so will the basic issue which is to save the endangered species. Thank you, Mr. Chairman. I would be

pleased to answer any questions.

Senator REID. Mr. Chairman.

Senator GRAHAM [resuming the chair]. Senator Reid?

Senator REID. I have to go to the floor, but I did want to say while you are here that I appreciate your holding this hearing. While the State of Nevada is very arid and desert, we rank with Florida, California, and Hawaii for listing of endangered species.

This hearing is very timely.

We have had some negative experiences but also some positive experiences in Nevada in dealing with the desert tortoise. Our latest experience in dealing with the desert tortoise has been both good and bad. It really brought the most rapidly growing area in America to a halt construction-wise until we resolved the problems with the desert tortoise. That is something I think the committee could profitably look at is how we were able to solve that problem to allow that construction to continue.

So, I appreciate your holding these hearings. This hearing is extremely important for all States, not only those that are lush and green, like Florida, but all those which are very beautiful in another way, like the State of Nevada which, by the way, had the

first listed endangered species ever under the Act.

Senator GRAHAM. Thank you very much, Senator Reid. I appreciate those remarks. I also thank you for your courtesy in assuming

the Chair while I was required to be away.

I apologize for not having heard the earlier statements but I have had the opportunity to read your statements as submitted and I thank each of you for your participation.

Mr. Hank Fischer, Northern Rockies regional representative, De-

fenders of Wildlife.

#### STATEMENT OF HANK FISCHER, NORTHERN ROCKIES RE-GIONAL REPRESENTATIVE, DEFENDERS OF WILDLIFE, MIS-SOULA, MT

Mr. FISCHER. Thank you, Mr. Chairman, for the opportunity to address the committee concerning the conservation of endangered species on private lands. We feel that improvements to the Endangered Species Act in this area offer the most opportunity for significant advances in conservation. When the reauthorization dust finally clears, we think that this is the area where Congress will choose to focus on.

Why are private lands so important? There are basically three reasons. First of all, 60 percent of the country is private land. Secondly, private lands contain the richest and most diverse habitats

in the country. Finally, and I think most importantly, fully 50 percent of the more than 700 listed species in this country are found exclusively on private lands. That tells you if we don't deal with private lands, we're not dealing effectively with endangered species.

I think if we're serious about ecosystem management, as this country seems to be, we can't ignore private lands. We have to have an ESA that encourages wildlife conservation on private

lands.

I have been actively involved in my position in the Northern Rockies with Defenders of Wildlife for more than 16 years intensively involved with endangered species issues. As you might guess, I have been involved in the standard array of strategies dealing with commenting on recovery plans, petitioning for listings, trying to persuade agencies to do the right thing, and sometimes filing lawsuits when they didn't. This regulatory approach, while it has had its rocky points at times, I think by and large has been successful on public lands. It has worked not by stopping development, but by modifying development and making it compatible with species preservation.

At the same time, my experience convinces me that we need a fundamentally different approach to private lands. We can't succeed solely by compelling landowners to obey an ever stricter law. On that point, I agree with many of our opponents that we need

a different approach.

We can sit here and we can argue for a long time, we can talk about all the problems, we can recite the horror stories but that is not going to change anything. What we really have to do is move forward and look at real solutions to these private lands problems.

But the good news is that they are out there.

We have been experimenting with offering incentives to private landowners for nearly a decade now. We started in 1987 when we developed a program to compensate private landowners in Montana for verified livestock losses to wolves. Over the past 7 years, we have paid approximately \$16,000 to 17 different landowners in Montana. I know this may seem like a small amount of money, but the important point here is that the impact has been disproportionate in terms of what is achieved.

Our endangered species issues are just as controversial as the ones I have heard here. By paying this compensation, we quelled the controversy which has been good for people, it has also been good for wolves. We have had a 20 percent increase in wolf popu-

lations in recent years.

Our incentive approaches have brought us into contact with some of the Nation's leading experts. What we have found is that there are a lot of people thinking about incentives, there are a lot of people who have very tangible ideas on how to build incentives into the Endangered Species Act. Last fall, we developed this publication called "Building Economics Incentives Into the Endangered Species Act" which I will submit.

What you will find in this publication is that there are four major approaches to offering incentives to private landowners. There are voluntary programs, trust funds, credit trade-in programs, and tax incentives. I have appended a sheet to my testi-

mony that gives you a breakdown on those different areas and how they might apply, and I would be happy to answer questions about

those.

I think what our publication demonstrates is that incentive-based plans are out there ready and waiting. What we need is we need for Congress to authorize the Secretary of Interior to move in this direction. Most importantly, we also need Congress to appropriate funds so that this can happen. Senator Chafee and Senator Baucus' bill S.921 does that. We support it. I think it is going to help solve the problem. Thank you.

Senator Graham. Thank you very much, Mr. Fischer.

The final panelist on panel two is Mr. Michael Spear, regional director of the United States Fish and Wildlife Service.

## STATEMENT OF MICHAEL SPEAR, REGIONAL DIRECTOR, U.S. FISH AND WILDLIFE SERVICE, PORTLAND, OR

Mr. Spear. Good morning, Mr. Chairman. My name is Mike Spear. I am actually in Portland. I have been their regional director for a week now. Prior to that time, I was in Washington for 2 years, having responsibility for the endangered species program. Prior to that time, I spent 10 years as regional director in the Southwest where I was involved with the endangered species program considerably.

I am pleased to be here today, and I thank you for this opportunity to share with you the Fish and Wildlife Service's perspective on how the ESA relates to private lands and private landowners. This relationship is critical to the effective implementation of the ESA in general and, in many cases, pivotal to the achievement of

our shared goal of recovering listed species.

We must not forget that the ESA was passed by Congress in 1973 as a result of the public's recognition that loss of species to extinction cannot be tolerated. We must remain true to the public's desires for conservation of these species while effecting a program that keeps the public in the formula for success. I would also like to take this opportunity to report on the status of several initiatives we are undertaking both to encourage private landowners to participate in recovery actions, and to help landowners comply with the ESA when their property provides habitat for listed animals and plants.

The purpose of the ESA is to identify species of plants and animals that are in danger of extinction; to provide a means whereby the ecosystems upon which these species depend may be conserved; and through so doing, bring about their recovery. The ESA does not exclude from consideration for listing those species found on private lands. Except for plants, the ESA does not generally allow certain specified acts that may be harmful to listed species on private lands; for instance, take. It does not bar the recognition of private land's sometimes vital role in species' recovery. Recovery of over 45 percent of currently listed species depends in some measure on the conservation of habitats on private lands.

The drafters of the ESA appreciated that environmental and biological problems often do not respond to solutions that are bounded by human property lines, and that considerations for political and other ownership boundaries are often biologically meaningless.

At this point, I would like to address a very good point raised by Senator Kempthorne about the salmon issue and the real life problems that are being caused in Idaho in Dworshac Reservoir. One

of the first issues I got involved with was salmon.

What needs to be recognized is the fact that we have fishermen out of work on the Pacific Coast as a result of the loss of salmon. Recently, the Federal Government paid \$15 million to help reduce coastal fishing boat capacity because of the decline of salmon spawning runs upstream in Idaho. We clearly have the economic problems on the coast because of the loss of salmon on the other end of the system.

What is being done to facilitate compliance? The most obvious approach is to use, wherever possible, public lands for the preservation of habitat necessary to protect and recover endangered species. Sometimes public land is capable of carrying much of the load for recovery of species. For example, the President's plan for the Northern spotted owl is based on public lands. However, in some areas it is not possible to construct a habitat plan exclusively on public lands. It is still possible to use a core of public land for reserves and impose lesser restrictions on private lands that buffer the core. This approach will be used wherever feasible.

In recognition of the importance of non-Federal lands in conservation matters, the Service has been restoring wetlands and endangered species habitat on private lands under voluntary cooperative agreements with landowners since 1987, a relatively small pro-

gram we call "Partners for Wildlife".

In 1982, Congress passed section 10(a)(1) amendments to the ESA establishing habitat conservation plans, or HCPs, to provide a means for non-Federal projects, that result in take of endangered species, to be permitted subject to carefully prescribed conditions. Section 10 provides a means to balance or integrate orderly economic development with endangered species conservation, and for the public and private sectors to develop creative partnerships to accomplish these goals. Consequently, the section 10 HCP process is more than just a permit process, it is a broad-based planning mechanism that, at its best, brings together Federal, State, and local Government agencies and private interests to address and resolve endangered species issues within a regional scope.

Since 1982 when these provisions were passed, the Service has issued 33 HCP incidental take permits and 12 permit amendments. Over 100 HCPs are currently in progress. I have a paper that lists and describes some successful HCPs, that I will not go into in the interest of time, but one of those discussed in the paper is the Clark County, Las Vegas, Nevada situation as discussed by Senator Reid. Also mentioned in that paper is the International Paper

HCP as discussed by Mr. Suwyn.

The underlying philosophy of the HCP is to use the Endangered Species Act to trigger a proactive planning process for long-range

habitat protection.

I would digress here and say that we fully agree with earlier speakers that such planning is best worked out at local levels; this is the intent of the HCP process. Experience shows that the goal of the habitat protection planning process should be the protection of multiple species; not just listed species, but also candidate and

potential candidate species. Once such a plan is adopted, local governments and private landowners can be assured a degree of certainty about development opportunities over a future period of time. Clearly, this issue of certainty is an important one in the minds of private landowners.

In a number of areas where contentious endangered species conflicts exist, this administration has embraced the HCP philosophy and has encouraged HCPs or similar processes to achieve the same objectives. For example, through the use of a special rule under section 4(d) of the Act, the Service authorized incidental take of the California gnatcatcher during the development of HCPs to protect this and other species dependant on the California coastal sage scrub habitat. In effect, what we did here is to go by State rules, since California had a very good set of State laws. Thus we allowed State laws to manage the endangered species process at the local level.

Similarly, to supplement the President's forest plan, we are trying to develop a 4(d) rule to allow for take of the spotted owl and

other species on private lands.

In some cases, where we cannot work out a reasonable habitat conservation plan with planning and management techniques, it may be appropriate to consider land exchanges or outright purchase based upon the importance and quality of the listed species habitat. Land exchanges have not been adequately used in the past. The Department of Interior and other Federal agencies own a large portion of land in the West that is potentially available for

exchange.

The Šervice is completing a new policy handbook for the section 10 program that is expected to significantly streamline the HCP process and make it more user-friendly for landowners, especially the small landowners. The Service agrees with previous speakers made that it is difficult for small landowners to use the existing HCP process. In response, we are breaking HCP categories into small, medium, and large based on the scope and impact of the project, not just on acreage. We also are tying document and processing requirements to those categories. Private landowners proposing small scale projects would be able to greatly trim the paperwork required for larger projects. In addition, many small scale projects would be given expedited review under NEPA requirements.

Numerous mechanisms to streamline the permit process would be adapted to each HCP category allowing small scale projects to be processed more rapidly. For instance, waiving solicitor review; basing project implementing agreements on a template, and, where possible, standardizing other procedures to reduce document prepa-

ration and processing time.

Recovery teams have in the past been largely limited to Federal, State, and other sources of biological and administrative expertise. Recognizing that private individuals and commercial interests are perhaps the most essential ingredient for recovering species on private property, those groups will be identified and brought into the recovery planning process where appropriate. This shared Service and National Marine Fisheries Service policy is intended to minimize social and economic impacts while bringing about timely re-

covery of species. It provides for a participative planning process which involves all appropriate agencies, and effects interest in a mutually developed strategy to implement one or more recovery actions.

Senator Graham. Mr. Spear, I am sorry but your time has ex-

pired. If you could summarize.

Mr. SPEAR. I wonder if you would just grant me a little indulgence. I am on the next panel and I won't be using any time on that panel. If I could quickly go through a couple more points here.

We are evaluating a number of other ways to minimize land use restrictions and provide a degree of certainty to landowners, that their section 10(a) permits will be final, and that the Service will not revise mitigation requirements after the development of con-

servation efforts.

In closing, Secretary Babbitt's objectives under the ESA are clear. The Department, wherever possible, will seek to place the burden of habitat conservation on public lands, to use mitigation techniques, and to work with local planning and zoning bodies to create multi-species habitat plans that provide both conservation values and a degree of certainty for landowners in appropriate cases.

We recognize that, in some cases, there have been lengthy delays in negotiation and approval of habitat conservation plans. In the Secretary's speech at Duke in October, he pledged that the Service will review this issue and seek to provide more flexibility in responding to the needs of individual small landowners in the use and development of their property.

We are on our way to developing new directives. Thank you for your time and consideration. If there are any questions, I would be

happy to address them.

Thank you, Mr. Chairman.

Senator Graham. Thank you very much, Mr. Spear.

I was interested in the various options for how to resolve the issue of Endangered Species Act application on private lands from the development of habitat conservation plans to incentives to other alternatives. What process is in place and what is your assessment of that process? Or what do you think should be utilized to determine which of this mixture of means of reconciling private and societal expectations would be most appropriate in a specific setting?

Mr. FISCHER. I would take a crack at that if you want. I think probably the most important things and one of the most problematical things is that we have to look at private landowners as they are. They are very diverse and they have extremely diverse needs from small rural landowners to large corporate landowners. A plan

that works for one doesn't work for another.

The four basic programs we have outlined I think tailor to that. The voluntary programs I think tend to work better with the rural landowners. That is a big area where we're really not doing very much work right now. There are a lot of landowners who would willingly protect endangered species if we told them what they needed to do. In other words, if we gave them the list of steps they could take that would help endangered species on their private

lands, I would guess somewhere on the order of 20 percent would

do that voluntarily. That's step one.

There are a number of voluntary programs, and I think the sort of programs that Mr. Meister pointed out are programs that work for other species, non-endangered species, that we ought to be fo-

cusing endangered species programs as well.

These trust fund ideas can be large or small as well, the sort of trust funds we have developed for wolves. It is an easy thing to do; it doesn't take a lot of money. We are looking at doing a similar thing now for black footed ferret restoration where we would pay landowners a certain fee to preserve prairie dog habitat which is the basic thing that black footed ferrets need to survive.

But then you get on to the other kinds of programs. The habitat credit trading programs are much more geared toward more urban landscapes, larger landowners. I think these are going to be people who have a lot more money invested in these areas because it

takes more sophistication and funds to work those through.

Mr. BUSTER. If I could just add to that, Mr. Chairman. It is really one set of considerations that you have to have when the endangered species net is thrown over existing residents' existing uses and quite another when you are dealing, as we are in some of our county, with prospective development and how you condition that, how you limit it, and how you pay, and we are paying for it. It is very difficult to explain the aggregate cost that we have incurred in Riverside for protecting one endangered species when we're running a very high unemployment rate. People naturally and justifiably have more important concerns on their minds and are wondering why local Government is not investing similar dollars in creating new jobs. So that is constantly on our minds.

The other question is, how much is enough? Here, we find, as the other areas in the country I think can testify, that the degree of the problem and what it takes to solve it lags far behind the actual imposition of the Act. So I think constantly there is this uncertainty that can lead to distrust, lead to suspicion, and lead to the kind of exacerbated-well, we had a firestorm of controversy that followed the actual fire in Riverside County. So we had two serious fires in Riverside County and it was largely because of this uncer-

tainty that exists with the Act.

Mr. Suwyn. Just to add a little bit to that. Our most frustrating part of an HCP was that it was kind of like we had a bag over our head and we had to kind of reach out there and nobody would turn on the light because there was an unwillingness to be very definitive. What is a "take" in the case of this Red Hills salamander? We couldn't get very forthcoming answers and the process wasn't nearly as consultative as it ought to be; therefore, it took a long time to kind of propose and see if somebody nodded or not, then propose another one to see what happened. That took an enormous amount of time.

I think a more up front consultative process with the landowner where you are kind of testing things out as opposed to declaring a yes or no position would really facilitate that process and start to draw those kinds of limits that he indicated.

Senator Graham. Mr. Spear?

Mr. SPEAR. Mr. Chairman, as a practitioner, I think we need a variety of tools. But if I had to pick one, I would echo very strongly what Mr. Meister of the Farm Bureau said: this notion of providing positive incentives that don't exist now to maintain species. I think he has made an excellent reference to the Conservation Reserve Plan and the Wetlands Reserve Plan. The Federal Government has decided it is of great value to this country to preserve soil and to preserve wetlands, and has developed programs that provide incentives for ranchers and farmers to maintain those habitats on their lands.

At this stage, we don't have a similar commitment about endangered species on the part of the Federal Government, by in essence providing those kinds of incentives. I think it would send great signals to the public that the Federal Government is behind the endangered species program with those kind of incentives. But more importantly, I have no doubt in my mind that incentives would evoke the kind of positive response that Mr. Meister said it would from local landowners who have the capabilities of preserving these species, if we say it is in our interest and it is in their interest to do so.

Mr. MEISTER. Mr. Chairman, Mr. Spear made my argument for me. Thank you.

Senator GRAHAM. My time is up. Senator Faircloth.

Senator FAIRCLOTH. Mr. Spear, from a practical standpoint, isn't it ultimately impossible to enforce and satisfy the Endangered Species Act. There are millions of species and thousands of candidates for protection. Is there any way that we can possibly create a bureaucracy—and I know we will work on it—large enough to monitor and design protections effective for every one of them? Is the

answer to it a bigger bureaucracy?

Mr. SPEAR. I think the answer is where we're heading now under Secretary Babbitt: the notion of an ecosystem approach to these problems. This approach gets ahead by looking at whole ecosystems, working with the private sector, working with State and local Governments, anticipating problems that lead to species decline, and developing plans that recognize and take those factors into account. If we focus on one species at a time, we are doomed; there is no doubt about it. We cannot monitor every species one at a time. But there is a better way and I think—

Senator FAIRCLOTH. What's the better way?

Mr. SPEAR. The better way is to look at things from an ecosystem-wide perspective, and that is starting to occur. Clearly, the President's Northwest Forest Plan is the best example right now of an ecosystem-wide perspective that has taken into account many species. Clearly, this process of change is painful for the communities and their economies. But as a result of that plan, the probability of having the sort of crisis that occurred in the mid-to-late 1980s in the Northwest forest industry is extremely reduced in the future.

Senator FAIRCLOTH. If I am hearing you right, what you are saying is we just need to put more under it, cover it bigger, and cover it broader, cover more land, more species and then there won't be any new ones to come up and get in the way. Is that what you said?

Mr. SPEAR. I guess that is one way of looking at it.

Senator FAIRCLOTH. Yes. Well, tell me another way to look at it.

Tell me, briefly, another way to look at it.

Mr. SPEAR. It's more than just covering it. Another way of looking at it is that, you get sharing of the impacts. Clearly what we're hearing today, in the unfortunate loss of property by Mr. Garcia and the members of the next panel is that individuals, single individuals in some cases, have borne costs. We need mechanisms and plans from Federal, State, and local agencies to share the costs of the program.

Senator FAIRCLOTH. You mean share the loss of his house?

Mr. SPEAR. I mean share the cost of planning to prevent problems to the extent possible. We can't have programs that rely on one landowner at a time coming forth to try to work something out. It is very expensive for them, and it is very expensive for the Government, to do that planning. We have to look at systems more broadly.

Senator FAIRCLOTH. In other words, if you take them all in, there

is nobody outside to complain.

Mr. Spear. They are all there to share.

Senator FAIRCLOTH. They are going to get all hit with the same

paddle.

Another question. You have got a small landowner in the Southeastern United States. You tell him he has the red-cockaded woodpecker on his land and he can't cut his timber. He wants to send his children to school. He has been saving it for 30 years to send

them to school by selling the timber. What does he do?

Mr. SPEAR. What we're working on with the States in the Southeast is the development of statewide habitat conservation plans, relying largely on the Federal lands and some of the large landowners, and relaxing restrictions on small landowners. The redcockaded woodpecker is clearly not going to be saved by small landowners, one at a time. Relief can be provided to many small landowners right now.

Senator FAIRCLOTH. Are you providing relief for small land-

owners to cut timber where you say the woodpecker is?

Mr. Spear. I don't know the specifics of the situation.

Senator FAIRCLOTH. I'm talking about specifics. What does the man do? Does he tell his child to get a job working at Hardee's until you all get a rule worked out?

Mr. SPEAR. Right now, the Act requires an incidental take permit for an individual to take a red-cockaded woodpecker nest on their

lands.

Senator FAIRCLOTH. I know small property owners who have been waiting for 12 years.

Mr. SPEAR. Again, I don't know the situation about that small

property owner.

Senator FAIRCLOTH. I had a lot more questions but my time has expired.

Senator GRAHAM. Thank you, Senator Faircloth.

Senator KEMPTHORNE.

Senator KEMPTHORNE. Mr. Buster, as I understand it you are the county commissioner of Riverside.

Mr. BUSTER. Supervisor.

Senator KEMPTHORNE. It is my understanding that the area of Mr. Garcia's reference was a high fire danger area. Were you consulted as a local official by Fish and Wildlife before their ruling came out?

Mr. BUSTER. The county fire department consulted with the Department of Fish and Game. So that consultation and the rules that resulted from it didn't reach the Board of Supervisors level. It was a technical change.

Senator KEMPTHORNE. But the fire department did. Did they ini-

tiate it or were they asked to give their input?

Mr. BUSTER. I believe that they cooperated voluntarily with the

Fish and Wildlife Service. They were part of the process.

Senator KEMPTHORNE. Mr. Garcia, I am sorry for the loss of your home regardless of what the circumstances have been. I know that must be devastating. When this ruling came out, did you or your neighbors feel that this was creating a hazard for you?

Mr. GARCIA. Oh, yes, because we live on the land and we know

the history of the fire area.

Senator KEMPTHORNE. Were you given an opportunity for input? Did you express that to the Federal Government?

Mr. GARCIA. I did not. I had no opportunity to have my say on

this.

Senator KEMPTHORNE. And you and your neighbors were not allowed to utilize your land; is that correct?

Mr. GARCIA. My neighbors were not allowed to utilize the land.

I have an orchard on my property.

Senator KEMPTHORNE. Did they seek to have any compensation for lost revenue?

Mr. GARCIA. I have no idea about that. Senator KEMPTHORNE. Okay, thank you.

Mr. Suwyn, you talked about the habitat conservation plans. As I understand it, you set aside 4,500 acres and harvested 2,500.

Mr. Suwyn. Right.

Senator KEMPTHORNE. In your testimony you also talked about incentives. Do you feel the HCP was an incentive or is that a tak-

ing?

Mr. Suwyn. The HCP allowed us to go from 7,000 acres that we had set aside to 4,500 acres because we were able to develop the basic research information to understand where they lived and where they didn't; what they ate, what ate them and so on so we

knew what areas to protect.

The net result is I have 4,500 acres that I will not be harvesting. But I did pick up 2,500 acres that I was not harvesting prior to that because we didn't know what was going to constitute a take or not. So I can look at it as either half full or half empty. I can now harvest on the 2,500 acres but the 4,500 acres, which is probably about \$5 or \$6 million worth of trees, will be set aside and not harvested.

Senator KEMPTHORNE. So you had the choice of either zero har-

vest on 7,000 acres or 2,500 acres?

Mr. Suwyn. Yes. The personal choice, if you will, we made to say let's go through the cost—it cost us \$60,000 and about  $2\frac{1}{2}$  years to go through the process of developing the data and then filing the

HCP. So it is a very expensive and involved process. On the other hand, I did free up 2,500 acres that beforehand had set aside.

Senator KEMPTHORNE. What about the lost revenue that is tied up in the 4,500 acres?

Mr. SUWYN. It is gone.

Senator KEMPTHORNE. So while you may be able to write that off, smaller operators would not be able to?

Mr. Suwyn. Well, I don't like to write that off, number one, I don't like to forego that. But even beyond that, multiply that by X

number of species and it adds up to real money.

Senator KEMPTHORNE. Right. Mr. Spear, I appreciated your testimony and you have a good reputation. The example of Mr. Garcia, is that a legitimate example? Is he a victim of the Endangered Species Act?

Mr. SPEAR. I can only answer based on my short tenure in the region and not being involved in the background. The only report that has been done on it is the GAO report. It would appear to me that this particular instance is not a result of the ESA. Clearly, there were difficulties. Clearly, circumstances could have resulted from our implementation of the ESA and practices that we worked out at the local level. But it does not appear that this homeowner's efforts would have made any difference in that fire.

Senator KEMPTHORNE. Is this a gray area or is it straight cut,

this is not an example?

Mr. SPEAR. No, I think this one is not an example. In hindsight, I think that the arrangements we've worked out since that time will reduce the probability of this problem coming up again. We're trying to be sensitive to the fact that we certainly don't want this to occur.

Senator KEMPTHORNE. Mr. Chairman, if I may just finish this question. Mr. Buster, county supervisor, is Mr. Garcia a victim of

the Endangered Species Act?

Mr. Buster. Let me put it this way, our Fire Chief for the county said he was asked, could he prove that in each of the 29 cases of homes being destroyed that the prohibition against disking within 100 feet because of the Fish and Wildlife concern about potentially destroying Stephens' kangaroo rat burrows underneath the ground, could he prove in each of those circumstances that the destruction would not have occurred if disking had been allowed? He said he couldn't prove that. There was no way to conclusively show that.

Now I visited that fire area. I visited other high fire hazard areas in my district as well and I saw homes that were cleared for hundreds of feet, many hundreds of feet that got burned, burned because they had a wood roof, burned because the homeowner wasn't present and prepared to fight the fire. I saw other homes, however, that had been cleared for 100 feet that were spared. So a lot depended on caprice of the winds a number of other factors, as you know. But I think the Fish and Wildlife Service, as I was trying to point out, should have been concerned with all kinds of fires, not just high wind fires. That in ordinary, slower moving fires it makes good sense to allow disking or other means of absolutely clearing the ground around structures to give the homeowner a maximum chance of protecting his or her home and it has marginal impact

on the Stephens' kangaroo rat who I would suppose, but not being

a scientist, don't like to live within 100 feet of homes.

Senator Kempthorne. I was a local official before I got here and one of the things that we stressed through our fire department in those high fire areas was to keep the fuel supply away from the home.

So the final word, Mr. Garcia. Were you a victim of the Endan-

gered Species Act?

Mr. GARCIA. I was a victim, Senator. I was a victim of the Act in spite of the conclusions reached in the GAO report since the GAO report in my opinion omitted a lot of the real facts that we presented the investigator with at the time. Any person can stand on the ashes of my home and look at the surrounding area and know that if the valleys between us and the prevailing winds had been allowed to be farmed as they were for the last 100 years, we would not have had a monstrous fire like this. It would have been localized. It would have been able to be controlled by fewer people than the U.S. Army.

Senator KEMPTHORNE. Okay. Mr. Chairman, thank you very

much.

Senator GRAHAM. Thank you very much, Senator Kempthorne.

The GAO report is going to be incorporated in the record of this hearing. Mr. Garcia and Mr. Buster, if you have any further comments that you would like to make beyond those that you have made on that report, we would hold the record open for those to be entered as well.

Let me ask one final question of Mr. Suwyn. You mentioned the 4,500 acres that have been put aside. Is there a process by which there will be a subsequent evaluation of the appropriateness of continuing to hold those 4,500 acres in a non-commercial collection basis? Do you anticipate that sometime there might be a sufficient recovery of this species that such a restriction on use might not be necessary?

Mr. Suwyn. This is a somewhat unique case because it is a very small part of the world that this Red Hills salamander lives. I anticipate that if they remain healthy, having been preserved in this area, that will probably be set aside for perpetuity. I don't anticipate that we'll find that we will go back in now. If something comes along, some disease or something and wipes out the Red Hills salamander, obviously then the reason for setting aside would have disappeared. But this particular area is very unique land and I don't believe that we will be going back in there in the future. So I think that is set aside for good.

Senator GRAHAM. But within the habitat conservation plan, is

there a process for periodic review of what has happened?

Mr. Suwyn. We can go back and propose a relook at that if circumstances change. But I am just guessing that on the particular kind of land this is that it is not likely to come back.

Senator GRAHAM. Gentlemen, thank you very much. We appreciate your very thoughtful comments and contributions to our hearing

Mr. GARCIA. Mr. Chairman.

Senator GRAHAM. Yes, Mr. Garcia?

Mr. GARCIA. May I include some items with my statement for the record?

Senator GRAHAM. Yes. Anything that you would like to be included in the record, Mr. Garcia and other members of this panel as well as the panel that will follow you, if you would please so indicate and it will be included in the record.

Mr. GARCIA. Thank you.

Senator GRAHAM. Thank you, gentlemen.

Panel three will, as indicated earlier, focus on many of the same issues that we have just discussed but with a particular focus on more urban areas. If the members of panel three would please come forward. Mr. Spear, you stated that you had completed your statement, but if you might join this panel for purposes of response to questions that we will have. I would like to introduce the members of panel three and then they will be called upon in the order in which they are introduced. First, Ms. Mary A. Davidson, property owner from Austin, Texas; Mr. Michael O'Connell, director of Habitat Conservation Planning, Florida Region, Nature Conservancy; Mr. Lindell Marsh of Siemon, Larsen, and Marsh, Irvine, California; and Mr. Ted R. Brown, vice president and general counsel of the Arvida Corporation.

Ms. DAVIDSON.

### STATEMENT OF MARY A. DAVIDSON, PROPERTY OWNER, AUSTIN, TX

Ms. DAVIDSON. My name is Mary Davidson. I am a wife and mother of three children ages 4 to 14. I live in Austin, Texas. Thank you for inviting me to testify here before you. I appreciate the opportunity to share my experiences with ESA. They have not

been pleasant.

In 1984, my husband and I purchased 1.45 acres of land which is completely surrounded by private property to build our homestead in Travis County north of Austin, Texas. We worked hard for the next 9 years at jobs in Nevada, Hawaii, and Texas to make enough money to build our home. By the summer of 1993 we had managed to save enough to finally begin the process of planning and construction.

As some of you may know, the area around Austin, Texas is the home of a number of species listed under the Endangered Species Act. One of those species is the golden-cheeked warbler, a small song bird. This bird was listed for protection in 1991 long after we purchased our property. To get a loan in Travis County west of the Interstate where our property is located loan applicants must prove that the building on the land is not restricted by the Endangered Species Act. Proof of this fact comes in the form of a "bird letter" from the local office of the Fish and Wildlife Service.

We sought a bird letter from Fish and Wildlife Service on August 16, 1993. The Fish and Wildlife Service told us that requests for bird letter generally take about 6 weeks to process; ours took sixteen. The Fish and Wildlife Service refused to give us a bird letter although they had never surveyed our property or that of our neighbors. They said that our property was in a suitable habitat; thus, the Fish and Wildlife Service said we would need a section

10(a) permit before we could build our home.

We asked what a 10(a) permit was and what it would require us to do. The Fish and Wildlife Service told us that we would need to mitigate by setting aside land for habitat. I told them we only had 1.45 acres and that we didn't have any land to set aside. Their response was that we could buy other land elsewhere that was good mitigation habitat. We were astonished—this felt like extortion—buying land for the Government in exchange for the right to use our own land.

Here it was the middle of December, I had no idea what to do. I was shocked this could be happening to us. I couldn't imagine being asked to go to this extra expense to use our own land when we hadn't caused any harm. I would never be able to sell or use the piece of property because of the restrictions under the Endangered Species Act. I felt betrayed that this was all caused by Government regulation. We did not know where to turn for help. It was at this point we finally realized that we were being denied the use of our land by Fish and Wildlife Service and there seemed to

be nothing we could do.

My mother-in-law heard on a talk show about the Texas Wildlife Association who she thought could help us. They directed me to Texas State Representative, District 47, Susan Combs. In January, I asked Ms. Combs to assist us in dealing with Fish and Wildlife Service. She did make an appeal and at first it looked like we would get a favorable response. Then when we had not heard for several weeks, Ms. Combs' office contacted Fish and Wildlife Service and was told that the staff maintained we must comply with the requirements of the 10(a) permit. Ms. Combs recommended that I call the Fish and Wildlife Service for an explanation and write to my U.S. Congressman and Senators. I did write to these people as well as several others, one of which was John Rogers, regional director.

I called Fish and Wildlife Service on February 7, 1994, asking for an explanation and Joe Johnston of Fish and Wildlife Service told us that our land was an existing bird habitat, contradicting the opinions of the two biologists we had hired. After paying for two biological studies, it became clear that our little plot of land was

devoid of warblers and would indeed be poor habitat anyway.

We did not have the money to buy additional land for an HCP. I asked Mr. Johnston why we had to do this and his response was that building a home constitutes urbanization even though homes, families, and children live in the neighborhood. The Government said that the commotion of our three children and pets would somehow disrupt the habitat of the warblers that were once sighted a quarter mile away. I expressed that I thought the cost of complying with the restrictions of a 10(a) might be astronomical. Mr. Johnston agreed and said, "The procedure outlined by Congress in the 10(a) permit are not procedures the small landowner can go through."

On February 22, 1994, I wrote a letter to John Rogers, regional director of Fish and Wildlife Service. This letter was essentially the same as the one I sent to my Congressman and Senators as well several other people. It was after this letter that the Fish and Wildlife Service in Austin responded with a letter dated March 25, 1994, and after reevaluation they had decided that we would not

be required to obtain authorization under the Act provided no warblers are found on our property if we agree to follow certain conditions. We paid for the survey and no warblers were found, so we

hope we can build our house but we still don't know.

The entire experience with the Endangered Species Act has caused us great hardship. I spent untold hours each day on this problem. We spent several thousand dollars to pay consultants to assist us. We put our building project on hold after we learned we would not have immediate use of the land. To start, stop, then restart a project is costly. We lost our opportunity to take advantage of low interest rates. In fact, assuming we will have to obtain a \$200,000 loan, the 30 years amortized increased cost for us to build has increased over \$70,000 just from December till now, which may amount to as much as \$200 extra per month. This could be such a significant difference that we may now not qualify for the projected mortgage payments.

One of the worst aspects of this entire ordeal is the horrible no man's land in which we found ourselves. The delays and uncertainty have been extremely costly, not only financially but stress to our family. It has cost us money we should not have spent. But more importantly, it has cost us uncertainty whether we can actually build our home. We are not alone. There are many others who also have been adversely affected. Most do not have the resources

to fight for their rights in court.

Mr. Chairman, I am deeply concerned about the environment. There must be a better way than what we have suffered. If the Endangered Species Act is the mechanism the American people want to use to protect the environment, then the cost of implementing this Act should be shared by all of the people and not solely by the individuals like myself. I will continue to make myself available to those who are working on the changes to the Endangered Species Act if that will be of any help.

Senator GRAHAM. Thank you very much, Ms. Davidson. I look forward to pursuing this with some questions after all of the introductory statements have been made.

Mr. Michael?

### STATEMENT OF MICHAEL O'CONNELL, DIRECTOR, HABITAT CONSERVATION PLANNING, FLORIDA REGION, THE NATURE CONSERVANCY, MELBOURNE, FL

Mr. O'CONNELL. Thank you, Mr. Chairman, for inviting me to give my views on behalf of The Nature Conservancy on the Brevard

County HCP and also on section 10(a).

The Nature Conservancy's work on HCPs throughout the country-and we have been involved since section 10(a) was authorized-indicates that HCPs are basically a sound mechanism. However they could be enhanced perhaps by better application of conflict resolution techniques, by better application of science which is in everyone's best interest, and also by implementation.

My own views are as the facilitator of the Brevard County HCP. The Nature Conservancy was asked by the County to facilitate this process and we have been volunteering our efforts. I would like to describe the Brevard County HCP first very briefly and then give some lessons learned not only from our experience but The Nature

Conservancy's experience as well.

The Brevard process began in 1992; actually it was unanimously authorized by the County Commission. But interestingly, they looked at a bunch of different alternatives before deciding to embark on a regional HCP. They looked at a short term interim HCP and rejected that out of hand. They also looked at a compliance plan which involved set asides on individual properties and rejected that as well. They chose the regional HCP because of the flexibility biologically that is offered by a regional approach. They also chose it because of the economy of scale that a regional HCP offers, for small landowners especially, but for everyone in sharing the cost.

Senator Chafee remarked earlier and everyone was discussing the issue of returning land use decisions to a local level. I think that the primary reason why Brevard chose the regional HCP is be-

cause they could then determine their own local land use.

My testimony addresses three particular issues with the Brevard HCP. The first one is the structure of the process. We have found the negotiation structure in an HCP is fundamental to its success. There must be the perception and the reality of "balance and buyin" from all of the affected interests. We have landowners that own scrub habitat—this plan, by the way, is for the scrub ecosystem and the Florida scrub jay in particular, but for 19 other species that are mostly candidates. We have scrub landowners, we have non-scrub landowners, we have the county interests, we have the incorporated cities, and we have environmentalists and developers all on our steering committee. One of the most important issues with regard to balance and buy-in is that we operate on consensus. Consensus in our opinion means the process does not continue until everyone is satisfied with the result.

Our second big issue is science. Science in some HCPs has been treated as almost like an affected interest and it has ended up being politicized. In fact, everyone on the steering committee in Brevard County has realized that good science is the foundation for long-term success of the HCP and the predictability that it offers, and everyone supports good science. There is no attempt at this

point to undermine that.

Finally, we have a massive public involvement process. We have realized that there is no such thing as too much awareness and that awareness-raising is an expensive and time consuming thing. The most important thing that we're doing at this point is a regional economic study to look at the impacts of not doing the HCP

and then compare that to the cost of doing the HCP.

The lessons we have learned in this process and also The Nature Conservancy's experiences elsewhere are that funding is important. We believe that there should be a mechanism established providing a readily available source of funds for regional habitat conservation plans. I won't go into that because others have. We have been fortunate in Brevard that we have had two congressional appropriations but others have not been so lucky.

To add predictability, authorization of section 10(a) permitting for candidate species might be a good thing to consider. However, those species should be considered as if they were already listed. In other words, thinking that we can lose more habitat for a species or more viability just because it is a candidate is probably a mistake and may drive some of those species over the edge of extinction.

There is some regulatory overlap that we have been dealing with, particularly under the National Environmental Policy Act. HCPs are subject to a rigorous public involvement process and a lot of that, in fact most of that, overlaps with the NEPA public involvement requirements. So there should be some coordination there.

We believe firmly, and as we have found in Brevard County, incentives would be a strong addition to the process. Incentives in particular are the predictability that is offered by the plan and the chance to share the cost among a much broader group. However, we are looking at some things like preferential tax assessments at the local level and also temporary conservation easements along with those preferential taxes that may provide incentives for some local people.

Finally with regard to small landowners, I believe in my experience and The Nature Conservancy's as well that the best way to deal with the problems that small landowners have is not to separate them out but to include them in regional HCPs. Small landowners benefit more than any other group from the economy of scale that a regional HCP provides. Their costs can be reduced dramatically. It isn't fair to have them bear the entire burden. But

that is what regional HCPs do is spread that cost around.

In closing, I would like to say that regional habitat conservation plans will always be a complex problem. It is a huge issue we're dealing with and it will never be easy. But with some of these lessons that we have learned in our experiences, they can be im-

proved.

One other issue that was brought up earlier was the issue of wildfire. Brevard County, Florida actually has more wildfires than any other county in the State of Florida mostly caused by lightning strikes. Scrub habitat is a fire adapted community and fires occur there all the time. Interestingly enough, unmanaged scrub, the condition it is in now, is highly susceptible to wildfires which are dangerous to peoples' homes. The condition that is ideal for persistence of scrub is well managed and it carries a very low risk of wildfire. So we plan through this HCP to address the risk of wildfire, and that is one of the many other benefits that it provides.

Thank you for the opportunity to share my views. I have a longer statement that I would submit for the record. I hope you have the opportunity to read it. I will be happy to answer any questions you

have.

Senator Graham. Thank you very much, Mr. O'Connell.

For all the members of this as well as previous panels, if there are further documents or extension of your remarks that you would like to file for the record, they will be received.

Mr. Lindell Marsh?

### STATEMENT OF LINDELL L. MARSH, SIEMON, LARSEN & MARSH, IRVINE, CA

Mr. MARSH. Chairman Graham, thank you for the opportunity to present this testimony. I am Lindell Marsh, a partner in the Or-

ange County, California office of Siemon, Larsen, and Marsh. My written testimony has been provided to the subcommittee. In summary, it describes, one, my role over the past quarter century as an attorney for landowners and developers in resolving conflicts between economic development and wildlife concern; second, my role in 1980 of proposing the first Habitat Conservation Plan, or HCP, which was for San Bruno Mountain south of San Francisco; and third, the role of your committee in 1982 in translating the San Bruno Mountain HCP approach into section 10(a) of the Endangered Species Act and the major paradigm shift in wildlife conservation that followed and that we are only now appreciating, embracing and learning to use.

The written testimony suggests that the old command-and-control, permit-by-permit, species-by-species, adversarial, quasi-judicial approach is like trying to fight a forest fire sweeping across the landscape; when the flames of investment-backed expectations are highest, our flexibility is lowest, and the problem of resolving the two is most problematic. There is a broad consensus that the program to date has resulted in fragmented and ineffective mitigation, very expensive and often unsuccessful attempts to save endangered

species, and a great deal of frustration and conflict.

The HCP conservation planning paradigm is very different. It is based on the policy objective of the Act to conserve the Nation's biodiversity. The resulting plans have many different names—HCPs; conservation plans; special area management plans; watershed plans, as suggested in your Senate bill S.2093; resource management plans or Chapter 380 plans as you use in Florida, Senator Graham; or natural community conservation plans as Senator Babbitt has embraced in California. The common element is that they all bring the constituency of interests to the table early—developers, conservationists, public agencies—to collaboratively reconcile the concerns in the context of a plan.

At the heart of my testimony is the concern that while there is a growing consensus that the HCP approach is our best chance to conserve the Nation's biodiversity, since the enactment of section 10(a) over a decade ago, only 18 HCPs have been approved. It is critical that we fill in the missing elements of the concept in order

to allow the idea to achieve its promise.

There is no question that the most powerful conservation incentive to private landowners within an urbanizing area is an HCP process that is quick, efficient, equitable, based on science, and provides predictability. Now, HCPs take three, four, 8 years and may cost the private and public sectors \$3 million for a project size HCP of several thousand acres and up to \$30 to \$50 million for the multimillion-acre multiple species planning efforts that are now taking place in Southern California. This is far too long and far too expensive.

How do we change this? I would like to focus on three specific points of my testimony. First, a technical point needs to be confirmed by amendment of the Act if necessary. Concurrently in approving an HCP, the Service issues a section 10(a) permit for this listed species and an agreement promising to issue a section 10(a) permit for any species in the group that may be listed in the future. This is because some believe that a take permit for a species

cannot be issued until after the species is listed. Congress should clarify what many of us believe is now the law, that a single permit can be issued covering both listed as well as species that may be listed in the future. This is similar to the manner in which we address future interests in real property. This would substantially simplify the administrative process involved without affecting the substance of the Act.

Second, in order to obtain a section 10(a) permit, a developer must minimize and mitigate the impacts to the species to the maximum extent practicable. Some suggest that in the event of unforeseen circumstances a developer may be asked to do even more. Unforeseen circumstances under an HCP is a component of risk that the developer cannot shoulder after being expected to maximize the mitigation provided. It is not necessary to amend the Act to accom-

plish this point.

Third, the most critical need is for a "funding framework." Some of us have roughly estimated that the cost of conservation in Southern California, exclusive of long-term management costs, would be approximately \$1.25 to \$2 billion. This is both a very large number and a very small number taking into consideration that it will be required over a long period of time of an economy that ranks eleventh in the world. In developing an HCP, we need to draw lines and establish expectations early. This cannot be done effectively without being ready to acquire some lands, without a

funding framework.

In Southern California, exactions for single family homes commonly range between \$20,000 and \$30,000. Further exactions will be resisted and would have a significant inflationary effect. Local, State, and Federal taxpayers are equally resistant to tax increases. To a large extent, the current conservation funding shortfall is an unpaid debt of prior development—prior urban development that used up the resource cushion, as well as the national settlement policy of the 1950s and 1960s that funded roads, navigation and flood control channels, and sewer systems but failed to fund conservation programs to offset the resource impacts of those systems. We can reasonably conclude that the shortfall is a collective unfunded burden. My testimony suggests several specific approaches for developing a funding framework to answer these concerns.

In summary, the process must be made quicker and more efficient. Second, assurances must be given that the landowner will no longer be subject to the risk of unforeseen circumstances once a section 10(a) permit is issued. Third, a single permit should be available covering listed species as well as species that may be listed in the future. And fourth, of greatest importance, a funding framework should be established for these HCP processes. Thank

you.

Senator Graham. Thank you, Mr. Marsh.

Mr. Ted Brown?

STATEMENT OF TED R. BROWN, PRESIDENT, FOUNDATION FOR ENVIRONMENTAL AND ECONOMIC PROGRESS, INC.; VICE PRESIDENT AND GENERAL COUNSEL, ARVIDA CORPORATION, BOCA RATON, FL

Mr. Brown. Thank you, Mr. Chairman. I too appreciate the opportunity to appear before you today as you begin deliberation on

the reauthorization of the Endangered Species Act.

The conflicting extremes which characterize the debate to date tend in my view to deprive society and Congress of meaningful alternatives which would serve to enhance species protection while at the same time affording reasonable opportunities for land utilization. Suggestions which we make here are intended to strike a balance between those extremes.

As you know, it has been more than two decades since the Endangered Species Act was originally enacted. But it is only within recent times that the Act has seemingly been coopted by many who have less of an interest in species protection, management, and enhancement than in the ancillary issues of growth management, de-

velopment control, and limiting the use of natural resources.

Today it seems clear that many who seek to use the Act to its fullest extent do so not in the name of developing a proactive agenda for the enhancement and preservation of species and their habitat, but to use the stick—and it is a sizeable stick—to list species in order to defer, delay, and in many instances bring to a halt economic utilization of land. This results in a loss of jobs, a loss of tax revenue, and in our industry significant increases in the cost of housing.

Efforts to modify the absolute prohibitions of the Act have historically been routinely rejected. The statutory language suggests that environmental values trump any and all other considerations. But the plain statutory language notwithstanding, it is clear that Congress did not intend species protection at any price and no matter the consequences. The comments of Senator George McGovern on the Senate floor in the 1970s and highlighted in the recent testimony of James McClure before this panel underscore that point.

That brings me to the first point that I would wish to make. Clearly, neither the Secretary's limited authority to grant exemptions from the strictures of the Act nor congressional stop-gap suspensions of the Act are a substitute for a reasoned and reasonable determination of which endangered species we wish to protect at

what price and under what circumstances.

Like so many other areas in the environmental agenda, what we argue for is a need for better balance, a mechanism that allows for rational decision-making and accountability. To restrike this balance, we believe you first must focus on the decision to list or not list a species. The decision to list should be based solely on science. But once the decision to list is made, the next decision as to what restrictions are to be imposed upon the land involved should now be subject to an economic analysis or cost-benefit study before restrictions would be made to apply.

In this context, therefore, the Secretary would make two separate findings: one, a scientific and biological finding as to the desirability of listing or not listing a particular species; and second, a series of economic or cost-benefit findings as to the desirability of

imposing any one or more sets of restrictions affecting land utilization. This would allow us to take into account the economic and social consequences of the listing so that consideration of these im-

pacts may be properly considered.

We believe that the Act should give a higher priority to full species protection. An escape valve can, and should be incorporated into the listing process so that in those instances where there are objective and reviewable scientific standards subspecies and distinct populations that have recognizable and definable social, biological, and economic benefits to society could be listed, when meeting these tests. But we would suggest in the absence of meeting those tests only distinct species would be listed in the future.

This problem is also to some extent exacerbated by the private listing petition which we think merits review by the Congress. The Service has developed a priority scheme in the past but the set of priorities can be, and has been, overwhelmed by the provisions of the Act that effectively require the Service to give immediate regulatory attention to private listing petitions. The question that arises is not whether there should be a priority system but who should have the authority to establish the priority, Congress and the Secretary or an unelected set of environmental strategists.

By eliminating the private petition, you would not be disenfranchising the private citizen. Citizens could still advocate a listing but instead of triggering a set of rigorous time constraints under which the Service must review the petition, the Service would without the artificiality of those deadlines constraining its review make the determination as to the propriety of listing or not listing based upon science and based upon its own established pri-

orities.

A word about science is appropriate. The need for it seems selfevident and has been testified to by a number of the panelists here today. This is particularly true it seems to me when viewed in the context of the recent California gnat-catcher case. The need to require standards that are more strict than best available data cannot be overemphasized. Information used in the listing should be verifiable, reliable, accurate, and quantifiably sufficient to justify the decision to list in the first instance. Peer review is clearly to be desired, and we applaud the recent efforts to move in that direction. But a word of caution is also appropriate. We believe it would be desirable for the Congress to consider conflict of interest standards in an attempt to limit the ability of consultants engaged in peer review or in petition filing to thereafter reap economic returns based upon listing decisions at least for some reasonable period of time after the listing has been accomplished. This would add to the objectivity and credibility of the process.

Next, let me turn briefly to the area of habitat conservation and planning and section 7 consultation. We support the adoption of procedures for the issuance of incidental take permits. But additionally, we believe that all property owners should be able to request and obtain consultation with the Service at any time and, having done so, receive a formal written determination of the regulatory requirements for the use of their land irrespective of whether or not they are involved in another Federal regulatory process.

With respect to habitat conservation process planning, we believe it must be refocused on the conservation of biodiversity and ecosystems as opposed to species if it is to have any chance for success. But the key component of all HCPs is that they must resolve all disputes regarding the effects on listed and unlisted species once the HCP is adopted. The process, if it is to be of any use at all, must be streamlined, predictable, more cost-effective, and more time sensitive. Absent resolution of these concerns, we would remain concerned and skeptical about the potential for success of this process.

Of particular importance are two ideas which are the flip side of the same coin. One is absolute predictability, that once you enter into the HCP and have committed your economic and land resources to the process, you can be assured that you can go forward. The second is what Mr. Lindell Marsh just talked about, is the necessity of being protected against unforeseen consequences. Presently, the Service and the landowner can all agree on an HCP but, absent revision here, no one can guarantee the final outcome. A new species petition can turn the whole effort upside down and that level of unpredictability does not allow for a bankable commit-

ment that a landowner may effectively use.

Finally, I want to close by focusing on a point alluded to earlier by many of the panelists, and that is the economic impacts that flow to the private sector once a species is determined to exist on one's land. In watching the recent Senate hearings on the confirmation of Judge Breyer to the United States Supreme Court, I was struck by the inquiry of Senator Biden in his discussion with Judge Breyer of regulatory takings. Senator Biden suggested that the trend line of the Supreme Court, if carried to its logical extreme, would have potentially catastrophic economic consequences for the Government in the context of the financial exposure that regulatory takings might pose.

What Senator Biden and Government seem to me to frequently overlook, however, is that if not borne by the Government—therefore the public at large—that cost is then borne by one or more private citizens. The cost cannot be ignored. It is real. It is tangible. It will be reflected on the ledgers of either the Government or the private citizen. Here, the landowner's activity giving rise to the regulatory constraint under the Act is wholly passive. In point of fact, it is the landowner's passivity with respect to his or her land that gives rise to the solution to the problem which the Act intends to address; that is, the preservation of habitat undisturbed and in

its natural state.

In this context, it seems clear then that as and to the extent a public benefit has now been conferred by the preservation of habitat necessary to the recovery and restoration of an endangered or threatened species, the public should bear the cost. Fairness seems to compel that result; otherwise, at its most basic, this program can be analogized to an unfunded mandate to the private sector.

If we believe there is a public benefit here—and I believe that is true in many, many instances—then I believe the public should be and, evidence suggests if properly informed, would be willing to

pay.

Thank you very much, Mr. Chairman. I would appreciate the written remarks be included in the formal record.

Senator GRAHAM. Thank you very much, Mr. Brown, and they

shall be included.

Mr. Spear, you did not make any opening comments for this panel, but I would be interested in your evaluation of Ms. Davidson's circumstances and what steps do you believe the Fish and Wildlife Service are, or should be, taking to solve problems such as the one that she just presented.

Mr. Spear. Mr. Chairman, I would be happy to do that. First of all, the Service regrets all these situations where a landowner is as disadvantaged as Ms. Davidson appears to be. Clearly, this outcome is not good for either the private citizen or the program at large. But let me step back and try to put this in a different con-

text.

In 1988, when I was the regional director, we started a process that would have developed a total habitat conservation plan for the entire western part of Travis County. We were very aware at the time, and so were local government officials, that there were many large landowners beginning developments. As a matter of fact, there were some RTC lands available and the potential for a new National Wildlife Refuge. The local people also had the fortune or misfortune that the economy was in a decline and, therefore, land prices were low. The housing situation was not booming as it is again now. So we had an opportunity at that time to put together a plan. The plan took several years to develop, but it was very strongly supported by local government officials—the mayor, the county judge, and especially Congressman Pickle. Thus, we kept moving forward.

The difficulty we got into was that while we were able to develop the biological requirements, we got down to a point where we couldn't find the funding. Texas State law prohibits levying of development fees, unlike the situation we heard of earlier where there was a large local, I think the term used by Mr. Marsh was, "exaction" or "development fee" or something of that nature. We tried to get legislative change so that this program could be funded. In essence, we were looking for a one-third, one-third cost-sharing of the development fees with the State, local, and the private sectors. We were unable to get it through the legislature so the locals held a bond election in August of 1992. That failed.

So in the end, after a plan had been developed over a period of 5 years, we could not find the funding to put it all together. Had the bond measure passed, the situation that Ms. Davidson finds herself in would very likely, almost certainly, have been relieved because we would have had an overall plan for the area. That was the purpose of those plans, to spread the cost among the whole community where there would also be considerable benefits.

Let me get to the specifics of her case now. When I heard I was going to be testifying today and I heard about Ms. Davidson's case, one of the questions I immediately asked was, what do we know about the situation now? Are there birds on her land? The answer I heard from the office is "We don't know." Apparently, from her testimony there are no birds there now. If that is the case, that her survey this spring found no birds, then the answer is she can build

a house. What she had been told by the local people is you need to do a survey, and if you don't find birds you can build a house. So if we have arrived at that point, then I guess she can record and I am sure the local office will communicate with her to work out whatever she needs. I'll stop at that point.

Senator Graham. Ms. Davidson, do you have any comments

about what Mr. Spears just said?

Ms. DAVIDSON. Only that I appreciate the fact that at this point we do have that letter that says that if we show that survey we can build. There are still some concerns, but that certainly is appreciated.

More than that though, it is what we went through between our initial application up to that point when I asked numerous times to be reconsidered. Like I said, in February when I talked with Joe Johnston of Fish and Wildlife Service, I asked him, if I have a survey done and it shows no birds, will you allow me to build in the non-nesting season? He said "The survey is not going to make any difference to me whether we require you to have the 10(a) or not." It was only after I wrote that letter to Regional Director Rogers that I got the response that I have now. That has been what has bothered me about our particular case.

I think more than that, overall, I particularly really love taking care of the environment and I find it upsetting to find that this puts us in an adversarial position with the wildlife. I want to have birds on my land. But if I have birds on my land, then I am not allowed to use it. I find that terrible. In fact, when the survey came back I said to the biologist, I said "This is a horrible way to have to end this, if that is what it ends up doing, because I want birds.

I don't want my place to be without birds."

But what are my choices? I get to use my land. I look at other people who are in the same situation and they say "Gosh, if that's what is going to happen to me, I'll just chop all the trees down to make sure that I don't have any habitat." You have got to make a choice between saving the environment and utilizing your property. It shouldn't be that way and it doesn't need to be that way.

Senator GRAHAM. Mr. Spear, I am going to focus on this case so that we will have a real live circumstance to use to test the Act. Two questions. One, is there anything that can be done to get a more expeditious response than the one Ms. Davidson indicated she received? And two, assuming that the survey had come back that there were some of the endangered species wildlife on her 1.4 acres, are there any steps that could have allowed her to use her property for the intended purpose of building a house while still protecting the habitat for purposes of the burden? Are we faced with an all or nothing situation?

Mr. SPEAR. There are a couple of questions. On the first point, more expeditious response. First of all, I obviously don't know the details of what you heard from Mr. Johnston or others. One thing that is difficult in situations like this is that you can obviously only survey when the birds are there—that particular period of time is when they come back from Central America in April. So if somebody comes to us after the birds have left, we can't make a determination until they come back; then you take a look. So we have

a biological delay built in that is impossible to get around in terms

of dealing with a survey.

The other part of the question is, what are the choices if birds had been found? I don't think there is any doubt that things are difficult at this stage for a private landowner. Without having the regional HCP that we tried 5 years to get, a private landowner has to get an incidental take permit. An incidental take permit can only be obtained through the application process. What we are working on, and what we're going to put out as future guidance, is a change in procedures to expedite the process for the small landowner. But the process won't go away. The law requires her to have a permit, and the permit requires an application and appropriate mitigation, if needed.

The other possibility is that you site the home on the property such that you can get around the problems of the "best habitat." I don't know for this particular property whether there is way to put a home on it without disturbing the habitat. That sometimes works. Very likely, for small properties like this, a solution might be very difficult because you have to deal with disturbance and other factors. So it may be that you get close to an all-or-nothing situation. If she applied for an incidental take permit, very likely she could get one, but she would have to go through the process. So she could have built a house, but it will cost both time and

money to go through the process.

Senator GRAHAM. In several of your testimonies you have discussed relationships that involve State or local Government. Do you have any comments or recommendations relative to the existing habitat process under 10(a) that would enhance that relationship between the Federal agencies and State and local agencies?

Mr. O'CONNELL. We have been fortunate actually in Brevard County. As you well know, Senator Graham, we have Preservation 2000 in Florida which is a massive land acquisition initiative. It generates \$300 million a year for acquisition in the State of Florida. There is our one-third from the State that was missing in the State of Texas. We also have the authority locally to initiate development fees and local zoning ability which is something that is missing in Texas. We have those ingredients for a one-third, one-

third, one-third match.

I think that most of the incentives that are going to exist are probably going to be local. As I mentioned, in Brevard we are exploring preferential tax assessments which is a very popular thing. Most of the people that are going to participate in this plan that own habitat are not upset about selling it for a fair market value; however, they are concerned about how long it will take to get to the point where they can close on that deal. So that is an important incentive. Perhaps there is an opportunity for the Federal Government to reimburse local governments for those types of incentives, I don't know. But we have been fortunate in having the State and local level partnerships that the HCP has brought together.

Mr. MARSH. There are two comments that I would make. One really comes out of the effort regarding North Key Largo that you, Senator Graham, as Governor were kind enough to empower with an Executive Order, with the assistance of Linda Shelly who is now

the Director of Community Affairs and the former Director of Community Affairs, Dr. John De Grove. In many of these cases, HCPs are treated as huge permit applications in which the local agencies and sometimes State agencies go forward and then submit these very large scale plans to the Federal agency. The view has been that the Federal agency sits back and then reviews it as they would a permit application. I think the better approach is that the HCP should be viewed as a plan prepared collaboratively by all of the parties so that at each point in the planning process there is a buy-in of the various interests involved.

The second goes back to the critical missing element in the HCP paradigm: the funding framework. The framework would contemplate funding from various sources, such as a revolving fund, similar to that which you are suggesting in S. 2093 in connection with the reauthorization of the Clean Water Act, or perhaps the navigation programs which provide up-front Federal loans that are paid back from local or regional revenue sources. There needs to be a collaborative effort among the various interests to figure out how

we are to address this funding problem.

For the small landowner, I think the section 10(a) permit could be made as easy as a section 7 consultation process. I remember on North Key Largo there were two small permits that were issued, as the Senator may recall. One was to a Mr. Bud Post and I think Mr. Post had 6 or 7 acres; and another involved 30 or 40 acres. The permittees spent relatively little to obtain these permits, although, as Mike Spear mentioned, there was a planning framework for the entire island. In that case there were four endangered species and the planning framework gave us a sense of what the needs of those species were. In this context, the individual permit can be very expeditious.

Senator Graham. If I could make an editorial comment on the funding issue and particularly on the necessity for predictability and collaboration. We're facing this same question on a recurring basis. As an example, within the Clean Water Act, one of the issues is, as we increase the emphasis on nonpoint pollution, there are going to be circumstances in which it would be highly desirable to have a funding source, for instance, to acquire the watershed of a particular river or area that you are attempting to protect. In the Clean Water Act provisions for wetlands, there are going to be some areas in which you would like to have a predictable funding source. In both of those cases, as with this, it is probably going to be a collaborative plan; that is, funding from multiple sources.

That observation leads me to raise the question of maybe we ought to be looking not at an act-specific funding source, but, much like Preservation 2000, a generic funding source which can be utilized in a variety of applications—Endangered Species Act applications, Clean Water Act applications, a State specific land acquisition program. I wonder if you have any comments about the desirability of such a generic Federal initiative for multiple layers of Government funding participation and what the Federal role might be, specifically a source of funding for the Federal share of that?

Mr. SPEAR. Mr. Chairman, I would like to take a start at that. One of the really heartening aspects of being a practitioner and working with the Act, is that in some of these very difficult situa-

tions when you would have expected local officials to be reticent, at best, about supporting funding; and when you would have expected them to argue that this is a Federal Act, you pay; in almost all cases the local people have said: you, the Federal Government, pay a share. I think what would really help is some mechanism that could indicate to local officials, State officials, and the private sector that the Federal Government is willing to share the cost and responsibility of Federal law; and that neither side pay full freight.

If local people can see that some support will be coming from the Federal Government, then they will go ahead and follow through with the developer's portion or the State/local portion. However, locals are reluctant to pursue funding if there is no commitment from the Federal level. So I think the cost-sharing notion indicates a sense of responsibility for both sides that somehow has not been

put into action.

Mr. Brown. Senator, I might want to add just one thought to that. I think Preservation 2000 in the State of Florida is a model of what we could anticipate the country at large would support. We have never really asked the question, are we prepared to commit substantial resources to an aggressive land acquisition program on a nationwide basis that would filter down at some level to add to the mix of revenues available at the State level? I am absolutely convinced if it is positioned correctly and promoted correctly that

the response to that would be overwhelmingly, yes.

Right now, we are in this totally adversarial relationship which tends to frame the argument at either end of the extreme and doesn't allow us to coop the middle where the vast majority of people wish to be. If you could get to the middle, then things like HCP planning and the rest where there is a balance of resources from Government and the private sector. Then you would then be able to get to a place where you can begin to extrapolate private capital which is really what we're talking about. How do you create a system that extrapolates private capital to do what Government doesn't have enough money to do even if it wanted to at the fullest extent possible.

Mr. O'CONNELL. Clearly, Preservation 2000 has enhanced tremendously our ability to resolve some of these conflicts in Florida. There is another little point I would like to add, and that is whenever we get into this situation, there are going to be limited resources. We are going to have to look at how highly we can leverage those resources. I think that in many cases with HCPs, funding for the process of putting together the HCP has been importantly lacking. As I mentioned, we have been fortunate in Brevard that we have gotten two successive appropriations of \$100,000 from Congress that have paid for biological studies and documentation

and things like that. Other plans have not been so lucky.

I think a very highly leveraged use of Federal funds would be to help initiate these planning processes where a local Government that was anticipating doing a regional HCP or a collection of local governments could scope our what they needed and say we need \$300,000, for example, and get that money up front. In Brevard, we have had an adequate budget but cash-flow has been a tremendous problem because the money has trickled in over time rather than come in in the timely amounts that we have needed. So even in a

case where it has been funded, it has been an issue. Something to think about.

Mr. Marsh. I have two thoughts, one on process and the other on substance. On the process, I think the way that you develop this funding framework is important. I think it should be done in a collaborative fashion, just as we prepare an HCP. Let me share a story that underscores the importance of such collaboration. When we did the North Key Largo HCP, we came to an agreement on a plan, actually, two alternative plans. One plan provided that the Key would be preserved in part and developed in part. The second provided that the development would occur for 18 months to allow the entire Key to bought out by the State. We then went to Tallahassee. Charlie Lee of the National Audubon Society and Bill Roberts, representative of the landowners. I remember the Speaker of the lower House saying that he had never seen the development community and the Audubon Society coming to lobby together. The result was that the money was obtained to buy out most of the Key with the exception of the small permits that I previously mentioned. I think that a funding framework should be developed in the same fashion, collaboratively.

With respect to the substance, it seems to me that the CARL fund in Florida—as Florida has often been a leader in these matters—is a good model for situations like those in Texas and California when it is critical to have the necessary funding available to effectively solve these problems. The money provides the oil nec-

essary to make the pieces of the solution come together.

Senator GRAHAM. In the sense we're using a Texas example as our model, you might clarify that you are using that metaphorically.

[Laughter.]

Mr. Marsh. With respect to the question on where the funding comes from. I think we have a number of models, including the Federal funding programs for infrastructure commenced during the 1950s and 1960s—highways, flood control, etcetera. For example, there is a current flood control program being implemented for the Santa Ana River in Southern California at a cost of about \$1.2 billion. The Federal Government is up-fronting the cost of the program, subject to repayment by local revenue sources. In a way, that original funding for infrastructure, it seems to me, should have included the funding necessary to mitigate the impacts of that development. From one perspective, the funding shortfall for wildlife is an unfunded, unpaid debt of our urban development. So I think that there can be some argument that past funding sources should apply to current wildlife needs.

Senator Graham. Ladies and gentlemen, we might well have some follow-up questions after we have a chance to review the statements that you have submitted. The same comment would be made to the previous panel. I want to thank each of you. Ms. Davidson, Mr. Garcia, I want to particularly thank you for giving us the opportunity to focus on a real flesh and blood example of how this act is working. I know that for each of you, as well as for other members of the panel, it was a major effort to come here today. For that, we are very thankful. I hope that, if it is any solace, one of the results of your experience will be to make us more sensitive to

these issues and try to work for some solutions for you and many other Americans who will be affected in the future. Thank you.

Thank you to all the witnesses who participated in the hearing

this morning.

[Whereupon, at 12:20 p.m., the subcommittee adjourned, to reconvene at the call of the Chair.]

[Statements and letters submitted for the record follow:]

STATEMENT OF HON. LARRY CRAIG, U.S. SENATOR FROM THE STATE OF IDAHO

There are two clearly defined sides of the private property rights debate over reauthorization of the Endangered Species Act. In one ear I hear a few environmentalists and others in Washington claiming the ESA is fine. They say it just needs a little tweaking, implying the only complaints are from big developers and others who intend only to pillage the land.

In my other ear I hear this growing roar, not just in Idaho, but from virtually every State in the country. People are saying what Congress intended for the ESA and what they're getting are very different things. In short, they say the government's gone too far by taking away the rights an individual has to use their own property.

I can list a number of unintended impacts on property owners in Idaho and I know we're not alone. Because the west has a higher percentage of the Federal lands on which the ESA was based we might have more fallout from ESA on private lands. But the same types of problems are coming up in virtually every state.

Those on the other side of this issue point to the fact there are no ESA takings claims in the courts, declare victory and are ready to move on. If they think that is the only measure of the consequences of this Act, they are sadly mistaken.

• In the Pacific Northwest, Bonneville Power Authority spends \$350 million a year to protect Salmon. Who really pays for that? Some big faceless company? They pass those costs to ratepayers and other property owners throughout the region. That's money homeowners might churn into local economies. It is also money business people might use to increase their payrolls, or purchase new equipment to improve competitiveness. The ESA is having a not so subtle ripple effect on property rights.

• The Northern Spotted Owl is an ESA issue I'm sure you are all familiar with. My colleague, Sen. Kempthorne has documented for you job losses in Idaho due to Spotted Owl and other environmental restrictions on logging. Have you considered there are impacts even beyond this tragedy? The Federal ESA does not specifically impose limits on timbering for adjacent private land. But in Washington State and California they accept Federal guidelines related to

the ESA and place "state" limits on private timbering.

There are a number of other impacts, some more diffusely related to private property rights. There's still an important connection. Though we're cutting less timber on public lands in the Northwest the demand for softwood lumber continues to rise. That timber will come from somewhere. Have we with ESA considered the increased stress on private timber lands around this country? If you stop cutting in the forests of the American Northwest and producers in Asia, or closer to home in Canada over cut to meet the demand will you be able to declare victory?

Let me take this a step farther. We know that timber lot owners in the Southeast are cutting their lands on shorter rotations. That's due in part to the increasing demand and higher prices resulting from halting the cut on many Federal forests in the Northwest. It's also more specifically related to the ESA. Many owners say privately, they don't want to make a home for protected red-cockaded woodpeckers and the accompanying infringement on property rights. They're cutting trees before they're old enough to be woodpecker habitat. We should need no more evidence than this that the private property infringements created from the current ESA are not accomplishing what was intended in the Act. This is not an enforcement problem, it's a clear policy problem.

• Timber is just one of the issues. Endangered Salmon in the Snake river is another matter my colleague, Sen. Kempthorne has brought before you. A test drawdown of the reservoir in Port of Lewiston cost property owners \$2 million from resulting damages. The taxpayers paid the bill for that one. Who will pay if the real drawdowns occur? Can you really compensate my constituents for the loss of business and other problems caused by this disruption?

• Drawdowns also threaten water used for irrigation. Agricultural users own water rights. This is another aspect of private property which the ESA does not take into account. Anyone who knows agriculture knows the value of the land the water is used on is tied directly to the value of the water rights. Restrict the water rights and you will reduce the value of the land. That is a cost we are going to see more of, related to the ESA. I would argue that in this case as in those you are seeing or will see in your states, telling constituents to go to court because we in the Congress failed to act to prevent this type of taking won't be good enough.

 Another example is ranchers who paid for permits to graze livestock on Federal lands facing cumbersome restrictions which forcing them to cut back their herds on private land. Leased land which is severely restricted means ranchers can't provide for all their livestock kept on their private land in the winter. This is one more case where unintended consequences of the ESA are

rippling throughout the private lands of the west.

As I've noted, the problems with the ESA are not limited to the west. Howell Heflin and I co-founded the Senate Private Property Rights Caucus because we sensed this was a national problem. We're studying the effects of ESA, wetlands regulations and other government programs on Fifth Amendment rights of Americans. I invite each of you on the committee to join us. Our goal is to make laws like the ESA respectful of and sensitive to the unalienable right to property which is one of this nation's founding principles.

I want to warn you, the calls for change in the ESA are not going away. This is not something organized by big special interests as environmentalists would have you believe. Through the work of the Caucus I've confirmed this is a legitimate grassroots movement. There are small property rights groups springing up out of nowhere in every state. They are usually members of a community coming together to support a farmer or someone else who's been wronged by Federal law, or associated State law. That's a potent force to contend with and you and I should take it very seriously.

It's important that we define property rights as we search for a new balance for the ESA which will preserve wildlife without trampling on the rights of the people. First of all, property rights are guaranteed in our Constitution. Many on the other side of this issue say we already have all the protection that's needed. There are scores and scores of laws passed in this body designed to further define the rights

guaranteed in the Constitution.

Would those who say we do not need to defend property rights further, also say measures like the Voting Rights Act were not necessary to ensure that a right guaranteed in the Constitution was upheld? There are countless examples which prove that argument completely groundless.

There is the danger under the ESA, property rights are being viewed as simply an attachment which can be arbitrarily taken when the government wants to. I encourage you to view them, not as something which can be separated from us, but

as a natural extension of the private citizen.

Private property is not something the government can treat casually. Chief Justice Rehnquist said in the recent *Dolan v. City of Tigard* ruling, the Fifth Amendment is on equal footing with our cherished rights to free speech and privacy. While there are certain restrictions on speech such as the Supreme Court's classic, yelling fire in a crowded theater example,' free speech in this country is sacred. So too, as Justice Rehnquist confirmed, are property rights.

There's one other important point related to the reauthorization of the Endangered Species Act and it is this War on the West theme I'm hearing. This is a smear campaign against the honest, hard working ranchers, farmers, loggers and others who depend on the land for their livelihoods. I want to clear the record: No one re-

spects wildlife-more or is more sensitive to the need to protect it than property owners in the western states.

Environmentalists condemn ranchers, farmers, homeowners and others property owners as malicious destroyers of the environment, but who could have a greater interest in preserving the land, and wildlife than someone who wants to pass their property on to their children and grandchildren? When I am back in my State I hear and see people who want to cooperate, with each other and with the government. They know preserving the land is in the best interests of everyone.

Idahoans love the private and Federal lands in our State for their beauty and their productiveness. They're looking for the government to offer them a handshake, not a punch. Unfortunately, in most cases we've got westerners standing with outstretched hands who feel like they've been sucker punched on ESA and other regulations. Rather than being rewarded for conserving species on their own, they are punished repeatedly by an inflexible bureaucracy. There are also a number of former environmentalists around the country who tried hard to do the right thing,

but were thwarted because they didn't do it exactly the government's way.

While you consider reauthorizing ESA, consider that the current law completely fails on property rights. It fails because it does not place limits on the government's exercise of power against private property rights. Nowhere are these failures reflected more clearly than in the current Administration. When property owners cry out for recognition of their constitutional rights, Secretary Babbitt responds with his National Biological Survey. Instead of respecting the bounds of private property the Secretary talks of eliminating borders and managing people as a natural resource in the same way he wants to manage animals and plants.

Those who think this is in sync with landowners and homeowners around the country had better listen to the backlash out there. I think those who deny property rights know more than they let on. Measure the reaction of the environmentalists. If there are no property rights takings as some Members of this committee and the environmentalists say, why are they acting as if they are threatened? If takings are not being caused by the ESA they have nothing to fear from this movement.

Unless you address property rights directly and in a meaningful way in ESA reauthorization, the cries will only get louder. Many of you talk about how there are no ESA takings cases in the courts. That is in part because many people are only beginning to understand the extent of many of the subtle but painful takings. It's because individuals can't afford to sue. On the other hand, there's a law which allows non-profits to recoup their legal costs from the judgment fund when, for example, they sue and agency and win a claim it's not adequately enforcing ESA

Has the committee considered balancing the law? Either give individuals the right to make claims on the judgment fund if they win a takings case, or take away the non-profits' right to recoup their legal fees. This is simply a matter of balance and

fairness and this idea adds that where it is sorely lacking in the ESA.

In closing, no matter how we vote on conservation its success or failure depends on the support of individual property owners across this country. If individuals feel they're being coerced or that their rights are being violated, all the enforcement in the world won't save wildlife.

## STATEMENT OF HON. RICHARD W. POMBO, U.S. REPRESENTATIVE FROM THE STATE OF California

Thank you, Chairman Graham, Ranking Member Chafee and the distinguished Senators on this Subcommittee for inviting me here to testify on this, the second in a series of extremely important hearings on the reauthorization of the Endangered Species Act. I am glad to have this opportunity to testify today as I believe that the most important issue to be addressed during the reauthorization of the Endangered Species Act is its effect on the rights of individual property owners.

The right to property ownership transcends the authority of both government and man. The framers of the Constitution clearly recognized this right as they laid out the foundations of American Democracy, and it has been reinforced time and time again in the courts. Our nation's third Chief Justice, John Marshall, wrote that "The right of acquiring and possessing property and having it protected is one of

the natural, inherent and inalienable rights of man . . . ." The important element of Justice Marshall's statement—embodied in the Takings Clause of the Fifth Amendment—is that such a right includes the guarantee of a reasonable amount of autonomy in exercising the use of one's land.

Therefore, when the government places restrictions on a landowner, as it often does in the name of the Endangered Species Act, it has the responsibility to ensure that such laws are equitable and that the public benefits derived from the listing of a species are paid for by the entire public, and not shouldered by a few whose

only "crime" is that they own property.

Mr. Chairman, I understand the concerns of these small landowners because I am one of them. Before coming to Congress, I made my living as a rancher on a small, family-owned and operated farm in Tracy, California. Like many who have made their living by ranching, my life has been shaped by the traditions and values associated with proper stewardship of the land. Lately, though, this tradition is under attack. In 1986 the Federal Government declared my land critical habitat for the San Joaquin Valley kit fox. This action effectively stripped my property of its value add forced my family to operate our ranch with an unwanted, unneeded, un-silent partner—the Federal Government. That is why I started a grass-roots property rights organization in California, and that is why I decided to run for Congress. While campaigning for my seat, I was greatly encouraged to find that, far from being alone on this issue, I was part of a growing American movement.

At this hearing, and at future hearings, Congress will be listening to the stories of ether property owners—people like me—who have experienced, first hand the regulatory misuse of the Endangered Species Act with its devastating consequences. No responsible person is opposed to protecting truly endangered species. I want to be clear about that. I believe their protection is necessary and does provide a significant public benefit. I also believe, however, that as our government takes steps to protect certain species, our rights as-property owners need not be sacrificed. This does not have to be an "either-or" debate. We can meet our responsibilities to the environment WITHOUT degrading or undermining the rights of property owners.

By using the expansive regulatory authority set forth in the Endangered Species Act, the Federal Government has the ability to control and manipulate vast amounts of property at no cost to itself. These powers strike at the heart of historical and Constitutional principles—specifically the values embodied in the Fifth Amendment. It is important to understand the very real possibility of a public backlash against legitimate environmental activities should the heavy-handed approach of the present Endangered Species Act not be reformed.

We must not forget that the strength of this country is based not only from our natural environment, but also from the rich diversity of our people. The rights and privileges of owning a piece of property represent a major step towards the fulfillment of the American dream. It is this dream that draws people of all races, creeds

and colors to our shores—such as my grandparents from Portugal.

We must also recognize that it is equally important to conserve our nations diverse species populations. These interests represent two sides of the same coin. Yet the continued pitting of these two interests against each other will only serve to damage them both. This issue requires a search for balance, and I am committed to working out a reasonable approach that can—I firmly believe—produce win-win results.

We all have ideas about how to achieve that balance. Senator Baucus and Senator Chafee have collaborated on a legislative proposal, S. 921, that they believe is the best approach to reform the Endangered Species Act. Secretary Babbitt, who has the ultimate responsibility of implementing the Act, has also indicated the need for a re-evaluation of this Act's implementation. I have my own proposal, H.R. 3978, as do a number of my colleagues on both sides of the aisle. While we may have different ideas on how to reauthorize this Act, we can all agree that reform is necessary. I hope that the House will follow the lead of this Subcommittee and continue the much needed process this year, as was originally scheduled.

To conclude, private property rights are at the core of our national heritage. This was once again reaffirmed on June 24 by Chief Justice Rehnquist in his opinion in the case of *Dolan v. Tigard*. The Chief Justice stated, "One of the principal purposes

of the Takings Clause is to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." As we move to reauthorize the Endangered Species Act, we must uphold the inalienable rights of property ownership. The Takings Clause of the Fifth Amendment is as important a component of the Bill of Rights as the First Amendment right to freedom of speech, or the Fourth Amendment protection against unreasonable search and seizure. If we allow any of our Constitutional rights to be diminished—then we are all less free. As Members of the Congress we swore to uphold the Constitution—the whole Constitution.

I look forward to working with all interested parties in forging a reasonable approach to reforming the Endangered Species Act. thank you again, Mr. Chairman, for holding this hearing and for advancing the debate on this very important issue. I look forward to an open and frank exchange as Congress proceeds further on this matter. I will be happy to answer any questions that you may have.

# STATEMENT OF HON. AL MCCANDLESS, U.S. REPRESENTATIVE FROM THE STATE OF CALIFORNIA

Mr. Chairman, thank you for the opportunity to be present today to introduce Mr. Yshmael Garcia, whose home in western Riverside County was lost in the devastating California Fire of October 1993, and to submit this testimony for the record.

As I mentioned briefly before the Committee this morning, there exists a substantial discrepancy between the findings of the GAO report (conducted many months after the fire) and the results of my helicopter tour of the fire zone with the Riverside County Fire Chief immediately following containment of the blaze. I wish to make it clear that although Chief Mike Harris spent 2 days discussing the fire in interviews with the GAO, he was not afforded the opportunity to review a draft of the report prior to its release, and by his own admission is not at all pleased with the outcome of this report.

I know this because upon seeing the GAO report, my initial reaction was "Is GAO talking about the same fire that burned over 25,000 acres and destroyed 29 homes in my home county?" Subsequent phone conversations over this past weekend revealed that although the Chief (among others who fought the fire) spoke extensively and candidly with the GAO about the California Fire, the final report indicates the existence of predetermined conclusions about the circumstances leading up to this massive fire. The Chief has stated that "he is disappointed that the emphasis of the report was on minimizing the potential liability of the U.S. Fish and Wildlife Service as a result of the fire". It is difficult to read the report without getting the distinct impression that absolution of the Service from any responsibility is clearly the focus of the report.

A prime example of this is the line of questioning taken by the GAO in interviews with the Chief. GAO repeatedly posed the question as to whether specific houses could have been saved, if disking had been allowed around the structures in question to create a firebreak. This is a flawed line of reasoning, as the Chief repeatedly tried to explain, because too many variables exist in that kind of fire situation to make a conclusive claim that one house or another could have been saved, if the homeowner had been allowed to disk. However he did make the point to GAO, again repeatedly, that the fuel buildup resulting from the inability to disk (or to farm adjoining fields or graze cattle) did contribute greatly to the size and intensity of the fire. This is a point, as you can see, which is completely lost in the GAO report:

"The professional views and judgments of county fire officials and other experts . . . were that the loss of homes during the fire was not related to the prohibition of disking as a weed abatement method." (page 9)

The other point which needs to be made subsequent to this, and which the Chief tried repeatedly to drive home in the interviews with the GAO, is that the County Fire Department continues to have problems related to lack of proper weed and brush abatement. As he has made clear to me, the lack of proper abatement will permit fire to be conducted to dwellings or other structures even on "a standard bad day". In other words, no massive firestorm is required to destroy homes and prop-

erty, if disked firebreaks are not in place. Even areas which have been mowed (as previously recommended by the Service) are ineffective, as they leave a flammable "ladder" up to structures. Again, this is a point which is not made in the final edition of the report.

As a Riverside County Supervisor in the 1970's, I chaired a fire management commission which devoted considerable time and resources to the management of this rocky, heavily vegetated terrain. From this came what we called the "Hillside Ordinance", in which was found the origins of the County's existing firebreak regulations. I mention this to provide a historical perspective, as the threat of fire is not

something new to our area.

I would observe that I am somewhat encouraged with the relative progress which has taken place on the matter of disked firebreaks since the California Fire. The Service and the County of Riverside are in the process of implementing a cooperative agreement which includes revised guidelines for weed and brush abatement. These guidelines permit the clearance of "all flammable vegetation within 100 feet around all improvements using methods, including disking, which expose bare mineral soil." I am attaching these guidelines, and an accompanying letter (dated May 23, 1994) from the Service to the County Fire Chief for inclusion in the record. While the Service has yet to formally enter into this cooperative agreement with the County, the revised abatement guidelines are in the process of being implemented. I am pleased with this trend of constructive interagency cooperation, and it is my hope that this agreement can serve as a model for improved fire protection and public safety policies elsewhere in California.

In conclusion, Mr. Chairman, I would like to make several points which are too easily lost in this emotional debate. The first is that, as demonstrated by Mr. Garcia and Mrs. Davidson here today, and people back in Riverside County like Victoria Coultas, Leroy Scribner, and others too numerous to mention, there is indeed a human cost to the implementation of the Endangered Species Act. Good, honest people are having their lives turned upside down by the implementation of an originally well-intended law, which has since become a blunt instrument for the narrow, so

called "environmental" agenda.

There are real needs of the people whom we represent to be addressed, and it is our job to do that as fairly as we can. We can begin by recognizing that problems with the ESA do exist, and they must be addressed. This can occur in one of a number of ways, but it must and will happen. It is up to us to decide how this will take place, but we can tolerate no longer the un-American abuses which an unfortunate few have had to endure, supposedly in the name of the "public interest". Let the public take an interest now, and see what has taken place on their "behalf. Mr. Chairman, the American people rightfully want to maintain and preserve their natural heritage. But I promise you, the majority of them do not want to see that happen at the painful expense of a small minority.



## United States Department of the Interior



FISH AND WILDLIFE SERVICE ECOLOGICAL SERVICES CARLSBAD FIELD OFFICE 2730 Loker Avenue West Carlsbad, California 92008

May 23, 1994

J. M. Harris
Ranger Unit Chief
Riverside County Ranger Unit
California Department of Forestry and Fire Protection
210 W. San Jacinto Avenue
Perria. CA 92570

Re: Fire Management/Weed Abate in Riverside County and Endangered Species

#### Dear Chief Harris:

This letter is intended to provide you with an update as to how the U.S. Fish and Wildlife Service (Service) is addressing potential conflicts between the protection of species listed pursuant to the Endangered Species Act of 1973, as amended (ESA) and fire management strategles, particularly weed abatement, in western Riverside County, California (County). In a meeting with a representatives from the County in County Counsel's offices on April 20, 1994, we discussed the controversy related to disking prohibitions and atructural damage from the wildfire that occurred in western Riverside County in late October, 1993. The disking prohibition was established in the Spring of 1989 under the County's weed abatement program in response to concerns raised by the Service regarding potential take of the endangered Stephens' kangaroo rat resulting from disking in SKR-occupied habitat. It applied only to areas known to be occupied by the endangered SKR.

At the April 20 meeting I concurred with the fire prevention measures described in the attached Fira Management Guidelines. We all acknowledged that fire management activities could come into conflict with provisions of the ESA; that weed abatement program activities, when carried out in areas occupied by threatened or endangered species could result in their "take". The ESA defines "take" as follows: "The term 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Take is further defined in 50 CFR chapter 1, part 17.3, through the definition of harass and harm as follows: "Harass in the definition of 'take' in the Act means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal breeding patterns which include, but are not limited to, breeding, feeding, or sheltering. the definition of 'take' in the Act means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly

Chief J.M. Harris

impairing essential behavioral patterns, including breeding, feeding, or sheltering."

I suggested that the Service and the County Fire Department enter into a "cooperative agreement" whereby the Service and the County would work together to avoid and minimize to the maximum extent practicable adverse impacts to threatened and endangered species potentially resulting from the implementation of fire management practices, in particular weed abatement activities. I stated that a previously proposed memorandum of understanding (MOU) between the Service and the County, that had accompanied the revised fire management guidelines was not the appropriate vehicle for the Service to resolve this issue. Instead a cooperative agreement would be more appropriate. It could be accomplished more expeditiously than formally amending the Riverside County Habitat Conservation Agency's incidental take permit and it could have the advantage of addressing other listed species in addition to the Stephens' kangaroo rat. The County, the County Fire Department, and the RCHCA representatives agreed to such a course of action. At our meeting, I also acknowledged the County Fire Department's stated intention of implementing a fire management program, including a weed abatement strategy that had been revised in light of a review made necessary by the October, 1993 wildfires. It is my understanding that implementation of the revised weed abatement program is currently in progress. It is the Service's contention that while the program may result in a very limited take of listed species, such take would not pose a threat to the survival of these species. It is the Service's intention to authorize such potential take within the context of the section 7 consultation that will be conducted with regard to the cooperative agreement action.

The County Counsel's office agreed to draft the cooperative agreement. The Service provided a sample for the format of such an agreement. The County also agreed to provide an estimate of the amount of acreage that might be directly affected by the weed abatement program, particularly on unimproved property. The Service needs such an estimate for completing the environmental assessment and section 7 consultation documents that are required before the Service can formally enter into the agreement.

I am anticipating a relatively prompt resolution in this matter. If you have any questions, please do not hesitate to call me at (619) 431-9440.

Sincerely, Lail C. Koketich

Gail C. Kobetich Field Supervisor

Attachment

1-6-94-HC-245

## FIRE MANAGEMENT GUIDELINES

All owners of property within the boundaries of the Stephens' Kangaroo Rat Short-Term Habitat Conservation Plan, including those within Study Areas, snall be permitted to perform the following flammable vegetation clearance activities deemed essential for protection of lives and property against the threat of fire:

### Improved Property

Property owners or their lessees, the County of Riverside (County), and the Cities of Hemet, Lake Elsinore, Moreno Valley, Perris, Riverside. Corona and Temecula (Cities) shall be permitted to clear all flammable vegetation within 100 feet around all improvements using methods, including disking, which expose bare mineral soil. Where the distance from the improvement to the property line of the parcel on which the improvement is located is less than the distance required to be cleared, the adjacent owner. lessee, or County shall be permitted to clear an area on his/her property sufficient to establish the required fire break. The removal of flammable vegetation does not apply to single specimens of trees, ornamental shrubbery, or similar plants which are used as ground cover, if they do not form a means of rapidly transmitting fire from the native growth to any building; structure, or improvements.

#### Vacant Unimproved Property

For vacant unimproved property, property owners or their lessees, the County and the Cities, shall be permitted to clear all flammable vegetation down to bare mineral soil using methods, including disking, to establish a 100 foot fire break at the property line. Property owners or their lessees, the County and the Cities, shall be permitted to exceed this 100 foot width if such a fire break is deemed necessary by the local Fire Chief to protect public safety and welfare.

Property owners or their lessees, the County and the Cities shall not be required to perform Stephens' kangaroo rat biological surveys, obtain authorization to incidentally take the Stephens' kangaroo rat, or pay Stephens' kangaroo rat mitigation fees as a condition precedent to performance of these fire protection activities.

With respect to property located within the jurisdiction of the County, it is acknowledged that property owners or their lessees shall be required to comply with the provisions of Riverside County Ordinance No. 457 if the aforementioned clearance activities are not conducted pursuant to an annual weed abatement notice or hazard reduction notice or written authorization received from an appropriate fire protection agency.

STATEMENT OF HON. KEN CALVERT, U.S. REPRESENTATIVE FROM THE STATE OF CALIFORNIA

The GAO report causes me grave concern for several reasons. First, the report set out to prove that U.S. Fish and Wildlife's mandate to disallow disking for fire prevention had nothing to do with loss of homes in the Winchester Fire of 1993. This report should have begun with a more objective approach.

Another serious problem I have with this report is that so many of the sources used in the report were misquoted, misleading conclusions were drawn, and statements were selectively chosen or taken out of context. One example comes from an individual whose home fortunately did not burn down. The report says this was due to the shirt in wind direction. In fact, the person disked a fire break around his home just before the fire reached his property. The shift in winds did not occur until after the fire had passed his property. Another misleading statement is the comment by U.S. and Fish and Wildlife that they offered assistance to remove debris and fire hazardous material and assist homeowners in weed abatement measures. The only "assistance" offered was to deny disking, a viable solution, and offer weed abatement measures that could spark a fire on their own, or were financially and geographically unfeasible.

The most glaring lack of regard to those interviewed in the report were the conclusions GAO drew from statements by Riverside County's fire officials. These folks spent many hours assisting GAO with the hope lessons could be learned from the Winchester Fire of 1993 and that such loss might be prevented in the future. After reading the GAO report the local fire chief was surprised and disappointed that a full accounting of their conclusions was not made. GAO asked the question whether of not absolute evidence existed that disking saved a home or if disallowing disking caused the loss of a home. The fire officials concluded after the fires not allowing disking was a contributing factor to the impact of those fires. The way GAO asked the question is at fault. Though no evidence existed to bring to a court of law, does not mean it was not a factor. If it played absolutely no role in the fires, it's ironic U.S. Fish and Wildlife will now allow disking during this year's fire season.

One final comment on the GAO report—the title. The title implies a sweeping examination of the Endangered Species Act and fire prevention. There are many issues that were not studied if in fact the title is correct. These include the highly combustible nature of coastal sagebrush (habitat for the threatened species gnatcatcher), the inter-department relationship between U.S. Fish and Wildlife and local fire officials, the scientific proof disking will harm the Stephen's kangaroo rat, and many more issues. When asked about this at the GAO briefing on this report, they said their mission was to only examine the issue of disking and property loss. If their mission was that narrow in scope, the title of their report should reflect that.

It is clear the only purpose of this report was to remove any liability on the part of the Federal Government. GAO investigators already had drawn their conclusions before speaking with local fire officials and victims of the fire. But the larger issue is not about the merits of disking or mowing in weed abatement. The real issue is whether or not people's health and safety comes before that of a rat or some other species designated to be protected. I hope this issue is properly addressed in the reauthorization process of the Endangered Species Act.

## STATEMENT OF YSHMAEL GARCIA, WINCHESTER, CALIFORNIA

I am Yshmael Garcia and until recently a resident of Winchester, California. I am now among the homeless. In my opinion the Endangered Species Act is directly responsible for the loss of our home and every thing we owned on this earth, as well as the near loss of-our lives.

My home was located on 27 acres in a rural area of Southern Riverside County in California. Our area consists of beautiful rolling hills and small valleys. Our neighbors have farmed these valleys for over 100 years by growing cereal grains on their lands. I personally have an orchard on my property.

About 7 years ago a small entirely nocturnal rodent known as the "Stephens' kangaroo rat", which inhabits large areas in Southwestern Riverside County, was declared an endangered species. This rodent is entirely nocturnal and I venture to say that less then 100 people have ever seen one, and probably more than one half of these have been biologists who have been studying them.

As a result of this listing, the county embarked on the implementation the Act and our area was designated a "Study Area". We were told that any disturbance of the area would be considered a "take" of this rodent and subject to \$50,000 fine for each instance. We were forbidden to disturb the soil in any way, nor were we allowed to cut any of the native plants in the area since the "Gnat Catcher" a song bird, soon to be declared threatened, would nest on these plants. The native plants in our area consist of sage, chamise and several greasewoods. All of these plants can grow to heights of 6 feet and in 6 years they invaded the hills around us and even filled the valleys where our neighbors were forbidden to farm or disturb the habitat in any way.

When we were stewards of our lands, we lived in harmony with all these creatures and our cereals helped feed them. We also kept these huge plants in check by cutting firebreaks through them. It is important to say that our area is a high fire hazard area and we had small fires every 3 or 3 years which were controllable because of the firebreaks and clearings formed by the farmed valleys around us.

On October 27, 1993, a fire caused by a toppled electric wire 7 miles away from us, encountered this huge 7-year-old brush and it roared uncontrollably through our hills and valleys and burned our home and several others, including 50,000 acres of the habitat of many species of animals and birds. When I consider the fact that many thousands of these creatures were killed in this fire and that their habitat and their population may take 20 years to recover, I can only believe that the Department of Fish & Wildlife has embarked on a kind of "Fearless Fosdick" Syndrome as concerns these creatures they have decided to "protect".

I believe that this disregard for our safety and for the history of fires in this area in fashioning an order of "Do Not Disturb" was irresponsible and single minded by the administrators of the "Act". I find their actions, in this case, to be unpardonable.

Because we were under insured, our loss in dollars is in-excess of 500,000. My wife, my four-year-old daughter and myself barely escaped with our lives at 4:00 a.m. in the morning and one of our two vehicles was burned on the road as we tried to escape the inferno. I recently read in a publication by the Endangered Species Coalition, that no takings of public property have ever won court approval under 5th Amendment rights and that the alleged conflict between the ESA and private property rights is all smoke and no fire. Well gentlemen, it was not smoke that melted the windows of my concrete stucco home with it's concrete tile roof and it was fire that came in and destroyed everything in less than an hour. It was fire.a It was a monstrous fire I wonder, could this be considered a "Taking of my property?"

In my opinion, we and our neighbors were damaged so terribly by the blind and insensitive use of the raw power that this Act has placed in the hands of people with a persuasion to preserve all species. Many times at the expense of humans and their property.

I believe that in a free society we should consider it more important to risk losing a few good laws than to enforce one bad one. Gentlemen, only you have the power to amend this Act so that human life and personal property are adequately protected. I hope that you will do so.

## DOMENIGONI BROS. RANCH 33011 Holland Road Winchester, CA 92596 (909) 926-1763

RE: COMMENTS ON REPORT OF THE GENERAL ACCOUNTING OFFICE AND REAUTHORIZATION OF THE ENDANGERED SPECIES ACT

To: The Honorable Max S. Baucus, Chairman, and Members of the Senate Committee on Environment and Public Works, and The Honorable Gerry E. Studds, Chairman, and Members of the House of Representatives Committee on Merchant Marine and Fisheries

We would appreciate the opportunity to add this to the testimony presented by Mr. Garcia. Upon reading the report by the GAO on the Winchester line in October 1993 we felt it necessary to respond since we were included specifically within the report as the "agricultural property owner". We felt the need to respond as the information within the report is not truly factual and consists of inaccuracies and needs clarification.

Our ranch has been in existence for 115 years and 5 generations. Shortly after the listing of the Stephen's Kangaroo Rat we were prohibited from farming parts of our ranch that had been historically farmed (approximately 800 acres). Our cultural practices and historic farming methods have always included disking firebreaks not mowing.

The type of terrain. flat to rolling hills with rock outcroppings makes disking the safest, most practical, preferred method. Disking cuts vertically through the dense, coarse, desert shrubs, turning the vegetation into the ground. Mowing is not a realistic alternative. Mowers are designed to cut grass and lawns. The blades on a mower are much smaller and they spin horizontally at high speeds. As a result, in our terrain, mowers are more likely to spark on rocks and ignite the dry chapparal. Additionally, mowing leaves the roots and stubs of cut vegetation intact and requires more frequent clearing.

First of all, to correct some inaccuracies in the reports.

On June 5, 1992 a Fish & Wildlife Service (U.S.F.W.S.), field representative came to the property and walked over about a 200 yard area of a 440 acre parcel of our ranch. He concluded that he felt there were kangaroo rats in the area and that only mowing would be acceptable. We informed him that our cultural, historic practices were to disk a firebreak and that this had been the technique used in this area for generations. Furthermore, we were equipped to disk, not mow. We have approximately 11 1/2 miles of fence line. The ranch does not have the equipment necessary for mowing. We attempted to explain the hazards of mowing and the costs even if it were feasible.

The Fish & Wildlife person recommended:

- 1. Before mowing wet the vegetation
- Then mow it
- 3. Then wet it again
- 4. Then rake up the clippings
- Remove the clippings

The report makes it sound as though the U.S.F.W.S. went to great lengths to assist us in finding an alternative to disking. This recommendation was the <u>only assistance</u> we were offered regarding this situation.

This method was not only infeasible, but economically unjustified. In order to create a firebreak in compliance with the U.S.F.W.S. recommendation, we would have to acquire a mower and a water truck with tank, hire a crew (in addition to the ranching crew) to mow, water, rake up the cut vegetation, all the while working under the stringent probibition against farming much of our land, to offset the added cost.

The report incorrectly casts us as property owners who defied a weed abatement order issued by the County Fire Department and therefore got what we deserved. On page six, the last sentence states, "the county fire department issued the agricultural property owner a weed abatement notice to remove the vegetation from the area in question." We never received a notice from the fire department on the area that we had been prohibited from disking as the result of the presence of Stephens Kangeroo Rat (SKR). We did however, receive a notice on the adjacent property and we complied by disking a firebreak.

We were asked to disk a firebreak by one of our neighbors, who was concerned about the safety of his family. We had been unable to disk the firebreak on our property bordering his land, as our family had for many years, because of the SKR prohibitions. We approached the U.S.P.W.S. in an attempt to get the necessary permission to disk the fuebreak, and were given the "assistance" described above., You will recall that our neighbor was the property owner who saved his home by disking a firebreak himself as the fire storm burned out of control.

On page nine, the last sentence states, "clearing a 100 - 1,000 foot area around a home would likely have not made a difference". My husband and I, at around 2:30am the morning of the fire, were able to save on horseback 100 head of cattle in a disked 500 foot wide area. We remained in the area until dawn with the cattle while the fire was around us.

During our interviews with the representative of the GAO, these items and many other comments were made which have either been distorted or not included in the report. This report creates a false sense of comfort with the true workings of the Endangered Species Act.

The GAO as an investigative arm of Congress should not be driven by a political agenda which leads to financial and personal ruin of so many Americans.

We urge you to amend the Endangered Species Act as necessary, so that we achieve a true balance without victimizing people and eroding our property rights.

Respectfully yours,

Cindy G. Domenigoni

Representative

DOMENIGONI FAMILY

Centy G. Domenioni

## Senator Graham

The E.S.A. E.P.A. I am a neighbor of MR. Ysh mal Garcia and I'm very upset over this K-RAT problem, Last October my wire and I were victims of the California Fire Storm, in Winchester, Ca. because or the K-RAT we or any of our neighbors were it might upset the RAT, when do you stop; putting a RAT before human lives and property, there not even enough land as it is for all or the people on this plants, but some people see the RAT more important than our ranches and farmlands and above all else the human race, I think that the good Lord has done a pretty good Job or taking care or this planet without our help,

On October 27th 1993 my wire and I went through the most territying experience anyone could think of, as the fire came over each hill and moved closer being fueled more and more by the uncut weeds and sage, that should have been turned back into the ground, but that might have disturbed the RATS, so instead my wire tried with a garden hose to save her home and everything init, untill it was to a point to stay and go with it or leave, the RAT won we left, later that day back on our property all that was left were piles of ashes

ashes, where her home once stood nothing but ashes, only the shells of cars and trucks were left, treesand plants looking as if they had gone through a blast furnace and dead animals everywhere, I don't know if you or your faimaly care about animals, but we do, and when all you see of your dogs and cats are ashes it's pretty heart breaking, not to mention all of the farm animals, we only had (4) four more years to pay and this place would have been paid for, now we owe the fedral Government 110,000 for the next 30 years, but were Just in our (50°) so that shouldn't be any problem - right!!!

As close as I can see it the K-RAT must

As close as I can see it the K-RAT must be a very, very expensive pest (RODANT), in fact if the government will go for it may be the farmers and private citizens should rence there property and raise RATS instead or hay, cats, chickens, cows, pigs, ect-ect-ect if we can get the E.S.A. & E.P.A. to buy them

we sure don't want them.

Lengeth MA lessier 8-7-94 AP# 467-210-033-0

aug 15, 1994 human & Esther Sandoval 33187 Sidney Circle Ulinchester CA 92596 To . The Itonorable Gudge May S. Baucus and members of Senate committee; reenactment of the Endangered Species act.
I hereby request that my comments be included with the comments of Mr. Ishmael Please abolish the Endangered Species act. It's original purpose of protecting mildlife has been so ididorted that we cannot line on our own properties with the abourt requirements. Un example of this was the 1993 Firestorms that migself, family and neighbors lived through. We were left defenseless against this disaster the Endangered Species act. The were not allowed to protect our properties ext educture the Stephens Rangaroo Ral. Do our lives count. This total violation of

 Respectfully yours.
Respectfully yours, Esther Sandoval
Munchester, CA
parel # 467190018-6
 8.3 - 729 1+2

Anna M. Klimko 34880 Rebecca Street Winchester, CA 92596

RE: COMMENTS ON REPORT OF THE GENERAL ACCOUNTING OFFICE AND REAUTHORIZATION OF THE ENDANGERED SPECIES ACT

To: The Honorable Max S. Baucus, Chairman, and Members of the Senate Committee on Environment and Public Works and The Honorable Gerry Studds, Chairman, and Members of the House of Repersentatives Committe on Merchant Marine and Fisheries.

I would appreciate the opportunity to have my testimony included with that of Mr. Garicia. After having read the GAO report on the Winchester Firestorm of October 27, 1993, and I having been one of the property owners depicted as the, "5 minute mobile home". I felt it necessary to correct the interviewers inaccuracies. Had the interviewer used a tape recorder rather than rely solely on his memory and some hand written notes, he might then have been able to keep his report closer to the truth.

Page 2 of the report states that out of the 29 homes destroyed in the firestorm, 18 were mobile homes. Because of that fact the report would suggest that they catch fire much easier than that of perminant type structures. Enclosed please find a local news paper artical to contradict that suggestion. Also, my mobile home was completely wrapped in metal, the last time I checked, metal doesn't burn. Other than a chest freezer, an old washing machine, and 2 cars, there was nothing flamable stored up against my home. Ironically, my front wooden porch was left standing.

Also stated in the report was testimony of "rapid wind shifts". Some homes were spared even though no weed abatement practices were used. Rapid wind shifts would have a great deal to do with that, don't you think?

Page 2 of the report would also suggest that actual notices of acceptable weed abatement practices were issued to property owners in the spring of 1989. I never received such a notice, or know of any absentee owners that have ever received a weed abatement notice of any kind since 1988 within the Steven's Kangaroo Rat (SKR) study area. No fire officials have ever entered the study area to perform weed abatement mowing on behalf of the absentee land owners who did not comply with the so called notices. That has left us with 5 years of unattened growth. Disking within 30' of a structure to date is still the only acceptable weed

abatement practice allowed. Any disking over that amount up to 100' requires written authorization from the fire chief. 100' has never been enough, we need to disk it all.

Page 7 of the report states that no one complained prior to the fires about the lack of protection afforded to residence incase of a fire. The study area residence repeatedly begged for leniency on the disking prohabition. These requests are duelly noted in public county council meetings and recorded on video.

Page 9 quotes me as saying, "the wind driven fire approched so quickly that it destroyed my home in 5 minutes". I never made such a statement. What I did say was that once my home cought fire, it burned in 7 minutes. On a 20/20 news program I said, "in 7 minutes my home was gone". Yes, after it cought fire. And I don't know how long that took since I was not present to see it burn. I explained that to the interviewer. The 7 minute time frame was given to me by a neighbor who was trapped by the fire on a clearing he had on his property while trying to rescue his horses. He had full view of my home and gave on approximate time of 7 minutes before my home was fully ingulfed with flames.

The report states, "no evidence is available to conclusively determine the specific cause for the loss of 29 homes". Gee, do you think that maybe if I had been allowed to disk my land (7.79 acres), and a weed abatement notice to move sent to the vacant land owner behind me to cut down the 5' tall, thick, highly flamable vegitation, my home might still be standing today? Is there a remote posability that my home along with everything I owned in the world may have been spared? We were never given the chance to find out. Wouldn't it be reasonable to think that disked land would have greatly reduced the amount of flying embers? To date, no notices are still being issued.

Page 10, my statement as the "one homeowner". Yes I do beleive that if the distant agricultural area had been farmed, along with our own disking practices and weed abatement notices, and absentee land owners were forced to comply with those notices just like any other land owner outside the study area. Spot fires would have more likely occured rather than the wave of flames that did occure.

The rocky hillside adjacent to my home has rock out croppings that were located at the fathest north east corner of my home. With a 150' clearence and a 20' higher property elevation than my roof top, chances would have been greatly reduced that my home would have burned had the weeds been cleard. My neighbor still has plenty of land left without rock that can be cleared with a farm implament. If farm implaments are impractical, well, owning bare land is just plain back breaking work.

Page 12. Why wouldn't you want written comments on a draft report if you were truely looking for the truth.? The buck stops at the office of the USFWS and the current ESA.

The ESA has become a very dangerouse tool used to chip away our own human rights. We are a nation under God. Where does it say that all men, animals, plants and insects are created equal?

We allow women to be battered, and children to be abandoned, heaven forbid that an insect should perish.

Once you become a victom of a natural disaster you understand how puny your little life really is. No matter how many of us pull together we cannot out wit mother nature. The best we can do is prepare for our own defence. But when that option is removed and enforced by your own government, someone has to be held accountable. If a builder builds a faulty building, he is held responsable. If our government builds a faulty law, thy too should be held reponsable.

If nature cannot survive on the 90% of land mass available to it, what's the last 10% going to provide for it?

I urge you to please support the changes necessary to compinsate for the human factor in the ESA.

Sincerely yours,

anna M Klimbo

Anna M. Klimko Winchester Fire Victom

August 15,1994

#### Dear Senator:

We wish to bring to your attention the deplorable consequences of the Federal Government's Endangered Species Act concerning the protection of the Kangaroo Rat.

On October 27,1993 at approximate 2;30 A.M. our barn was completely destroyed by fire caused directly by our Federal Government not allowing the farmers to plow or disc their fields.

While I was standing by the barn, a fire ball traveling very fast in the high winds came from the farmer's field across the dirt road from us. The weeds were 4 to 6 feet tall at that time and I had been quite concerned as to just what would happen in case of fire. I have to inform you that I found out very quickly! less time that it takes me to write this, a fire ball, generated by the fire storm hit the barn, which promptly was destroyed. I had plenty of water pressure and I could have had the fire out in five minutes. However, we are on well water and the electric company turned the electricity off. At about the same time the pine trees in front of our home caught on fire, also from the same farmer's unplowed fields. With the help of two young men our home was saved, but not my 20 year collection of rare and exotic [Psittacitormes] parrots. We lost well over a hundred finches and over one hundred large birds, none of which had a re-sale value of under \$500.00, and that was for the small birds, such as Sengals. Sun Conures etc. Most of my birds were large Macaws, Cockatoos, Amazons, Electius, African Grays etc; a monetary value of way over \$100,000.00. It isn't just the monetary loss of the birds, but their potential that is heart-breaking. I had many birds on eggs and when you realize that a hand raised Mollucan cockatoo sells for \$2500.00 you can easily see and understand the vast earning power these birds had. In addition, we lost all of our holding cages, flights and breeding cages.

Do you have any conceivable idea what it is like to watch that many birds go up in smoke? I mean just disappear! Incenerated!
Many of the big Macaws and Cockatoos I had raised by hand and had set up in a breeding program. These beautiful, highly intelligent birds, who bond as closely to humans as human children and all of whom were and are on the C.I.T.E.S. Appendage I list, which is an international organization started by the United States and means that no more birds can be imported. NO MORE! Which also means that we will never be able to replace these birds, nor will we ever have the money to do so-----this whole thing was too horrible to watch and 10 months later, I am still having night-mares. I will never get over the trauma of losing all of my beautiful birds. ALL BECAUSE OF A RATI

As an Aviculturist, dedicated to the raising and preservation of these magnificent birds so that coming generations can enjoy them and have them for pets; I am doubly heart-broken.

That's not all we lost. Because there is so little storage space in our home we lost all of our yard equipment. Hammers, saws, power saws and drills and that list too goes on and on. We lost a fifty year collection or records, many many are irreplaceable. Over 500 books, many collectors items. All kinds of antiques and items bought by my husband from over-seas. Four Rosewood dinning chairs, beds, desks, new dishwasher to be installed. A brand new tractor mower as we are on 5 acres and purchased by our son--a \$300.00 pressure canner, my iron and ironing board and my sewing machine.. All kinds of material. purchased overseas and brought back as gifts by friends. The list goes on and on. Almost every day i realize that something I need was lost in the fire.

We received no financial help from FEMA, nor the Small Business Administration, nor any other Federal Agencies. Everyone seemed to be passing the "buck" from one agency to another.

I am a retired Marine and fought in two wars for the preservation of our country and way of life. I am a Veteran of Gudalcanal, South Pacific and Korea. There is no way at my age that we can start over and I blame the K-Rat for our loss of our life savings and a means to be self-supporting and continue to pay taxes. As his wife, I will admit that I am bitter over this loss and also the thousands of dollars that was given to illegals after the fires in the Los Angels Area, which our taxes help to fund.

Altogether our losses are way in excess of \$200,000.00.

It is inconcievable to us that our Government would place the welfare of a disease carrying rat that destroys property by its very nature, above the well being of humans and their property.

Sincerely

Robert H. Bahner
Selice Legger
Felice Bahner

33315 Fields Drive Winchester, Ca. 92596 Bill E. Rennie 34770 Rebecca Street Winchester, CA 92596

#### To Whom It May Concern:

Recently, I had read that the General Accounting Office report had disregarded any association of the Winchester firestorm to the restrictions set upon us because of the Steven's Kangaroo Rat (SKR)/Gnat Catcher agenda. (Engangered Species Act) Without a doubt, I know if I could have cleared the weeds, and sage brush from my property. If I could have been able to scrape the vegetation or disc to my property lines. My home would be standing today. The impression I ve had since the beginning of this SKR study. is that Riverside County Officials and Fish and Game wanted me to believe that I couldn't do anything that would disturb the SKR and if I were found doing so, fines would be issued. You may have found that certain weed abatement practices and other notifications for vegetation up keep was allowed in your study. But you had to go look for it and probably knew where to find it. Like advertisement disclaimers on the bottom of contracts, the ones where the print is so small you miss it and find out later, you been had. Well thats how I feel this was handled. As Federal, County, State and City Officials, you have a responsibility to keep the public informed. I feel that it was the intentions of our leaders to keep us misinformed.

I'd been living at this property since April 1989 and not once received a notification on weed abatement. When I first heard about the potential of a SKR preserve in April 1989, I wrote a letter to Mr. Farnhurst who was in charge of the SKR study at the time and I never received any response. Having wrote a couple more letters and a few phone calls on the SKR issue, I still never received any responses. The first notice I received on the SKR study was several years later, I believe in 1992. I mention this because I've always felt that the government wanted to keep us in the dark so we wouldn't know what was going on, and feel the same with this report. I've tried to uphold the misinformation I've receive at Riverside County meetings. Such as, the one meeting we had and the Fish and Games informed us that house cats, bright lights and excessive children activity was a concern of theirs. With this jargon going around do you blame us for not knowing what we could and couldn't do with our property. I had a fire truck visit me while I was burning vegetation one day. They told me I was only allowed to burn tumble weeds and nothing else. I didn't have tumble weeds on my property, only thousands and thousands of sage bushes which I wanted to clear out.

Having heard about the gnat catcher and its environmental living quarters, the sage brush, my clearing days were over. I felt the pressure of not wanting to be fined, or made an example by Fish and Games for destroying and endangered species living area.

I know for a fact that my home could have been save if I was allowed to do what was necessary to keep brush away. My home was located at the top of a knoll in the middle of the property. If I would have been allowed to disc, scrap or even mow 200-300 ft to the property line the fire and intense heat never would have been a problem. I have 5.5 acres of land. You got to remember what we were led to believe, do not disturb endangered species present.

Even if Riverside County had a weed abatement program, and they did inform us the home owners that certain parameters of cutting, mowing etc. was allowed. We were not given enough direction or footage of area to protect our homes. The day of the fire, I participated in fighting it. The storm you talk about with the flying ambers and burning debris could have easily been taken care of if the fire was kept a distance from my home. You see the fire came running up the side of my knoll like Jesse Owens running the 100 yard dash. it jump from sage brush to sage brush getting hotter and faster with each passing minute. Before you could have prepared for it, the heat was so intense that the flesh would have melted of the bone. That wouldn't have happened if the land was cleared. My neighbor to the east of me had his property cleared and a huge motorhome parked in the middle, if you had watched 20/20 you would have seen the difference between his precautions and my lack of precautions. My property was scorched and his property, motorhome included wasn't touched. Every person I've spoken to who has read about the General Accounting Office conclusions shakes their head, while saying the GAO is only protecting the Governments butt.

This is exactly what is bothering the American people today, We don't have leaders who have enough integrity or honesty to step in and say this is wrong. Leaders who will show concern for the everyday person, listen to their plight and then do something about it. To come to a conclusion like that of the GAO tells me loud and clear, the agenda of covering up was set before the facts of this disaster were even looked at.

Thank you,

Bill E. Rennie.

August 13, 1994

RE: Comments on GAO Report

Reauthorization of the Endangered Species Act

To Whom It May Concern:

As I sit here trying to sort the thousands of relevant thoughts in my head, I struggle with the sinking feeling that nothing I have to say will make any difference. I find it difficult that a group of people would come to the conclusion that vegetation growing out of control for five years would not be a contributing factor to house being destroyed in the Winehester fire (10/27/93).

I realize that one of the arguments was that homeowners who had cleared brush lost their homes along with those who had obeyed k-rat restrictions. My home was situated on a large dirt pad with a significant amount of "fire-retardant" plants surrounding it. It was impossible to consider it safe since we were not allowed to disc fire breaks around the perimeter of the property. The large fields of sage and weeds permitted the fire to become much hotter, much faster than if the fields had been maintained in the ways the fire department recommends. I'm convinced that many of the homes would have been saved if we had been allowed to use common sense, instead of being restricted by regulations to protect an animal that no one is sure is endangered.

In regards to rewriting the Endangered Species Act, I would like to share the nightmare my family has endured due to the inhumane treatment of the humans that happen to live in k-rat country. First, my three children (ages 7, 5, 2) are dragged from their beds at 1 a.m., told to get dressed, grab their favorite toy, and sit in the car. There's no time to explain why and no time to comfort or calm their fears. Their parents are busy trying to decide what needs to be saved and what can be replaced. (We did fairly well, all things considered.) We move into one bedroom of my parents house for two weeks, while we spend hours completing forms at FEMA. We then move into a small 2-bedroom house, 45 minutes away from their school and proceed to commute them. We finally reach a settlement with our insurance company to pay our rent and move a third time. During these two months, we are dealing with the "adult" concerns and waking up 3 or 4 times a night to deal with nightmares. We then get the privilege of trying to find a decent contractor, make a list of everything we lost, convince clerks at building and safety that we don't have to pay mitigation fees, fight with landlords over stupid regulations, still get up 3 or 4 times a night to deal with nightmares, work full time, commute kids to school, and read in the newspaper that the County is holding meetings regarding our property and the final k-rat habitat.

At what point to we finally realize that if this little rat has survived on my property for the 13 years that people have lived there, it's probably not going to die. Where do we say that humans are just as important (if not more) than animals. Has anyone considered what the world would be

like if all the species that have become extinct hadn't? There wouldn't be enough food for anything. Isn't there enough open space, without harassing homeowners. In the k-rat case, the State or County own several parks (Lake Skinner, Lake Matthews, Lake Perris, and now the Donmengoni(?) Reservoir Project). In reality, the gnat catcher, k-rats and the checkered butterfly can be protected on that amount of acreage. The conservationists can develop a plant preserve that will attract this animals in those parks and there is no need to waste tax dollars on buying private land.

I'm not sure why this is so difficult to understand. We have a national park system that should provide a safe haven for the wildlife of our country. Why do we have to waste so much time and money? Why don't people count anymore? Why can't we show as much compassion towards the poor as we do toward animals? Maybe we need to get our priorities in order before we do anything more on the Endangered Species Act. Currently the most endangered species that I know about is the traditional family unit (2 parents - 1 male, 1 female, and children). Where's the federal act to help us?

Sincerely,

Jill 4. Saix Jill A. Saix

P.O. Box 158

Winchester, CA 92596

(909)672 - 8244 or (909)424-2965

Page 1 of 2

Millard C. and Margie A. Marvin 34400 Grigg Road Winchester, CA 92596 (909) 926-9228

August 12, 1994

SUBJECT: GAO Report-Comments

Reauthorization of Engangered Species Act

Add to Yshmael Garcia File

We have lived in the un noorporated area of Winchester, California since 1987. We a located in the corridor between Lake Skinner and the Domenigon' Valley Reservoir Project. We had no fear of fire when we purchased and developed this property because we had no idea some agency would forbid the maintaining of the property in a fire safe manner. In fact, after five months (May 1987) we did suffer a wildfire, started by lightening. No problems, our property was clear and the fire department complimented us on its condition. Two years later Bachelor Mountain burned it was a very large fire. It started from a campfire at Lake Skinner. It was backfired at the fire break and no buildings were lost. It was not ideal conditions, it was windy and the mountain had not burned in 80 years.

In 1988 our property was included in the study plan area by the Riverside County Habitat Conservation Agency for the Stephens Kangroo rat. We received no notification from any agency regarding this taking of our property rights. We called our county supervisor to confirm this. The study was to last three years-it was extended to five years and is on-going at this time in its seventh year. For this time there has been no discing of private property, the County of Riverside no longer enforced weed abatement and the fire breaks were not maintained. We are surrounded on all four sides by open fields that just kept piling up fuel for a wild fire.

The California Fire in October 1994 was two ridges of hills from our property when we awoke at 2:30 a.m. The fire started from arcing power lines and was whipped by Santa Ana winds. Once the fire got a hold on the fields laden with dry brush, a fire storm developed. The firemen were afraid to get close enough to fight the fire and had no steady water source, although we are less than a mile from the San Diego Aquaduct. We watered all we could until the power went out. We have horses that had eaten much of the underbrush next to our fences. Inside the fence around the house we have kept the landscaping well watered. The fire came to our road on the north and did not jump it because we had disked from the road to the fence two days earlier. The fire came up behind our house across ten acres the horses had pretty much eaten down except for the sage bushes.

The storage shed burned flat. By a fluke it had my books, all my family pictures, all my slides from 43 years of raising a family. so many family mementos. My plant shack burned flat. The plant shack was a gift from my sister. The fire storm wind tore my plants and lattice from the patio and the house was filled with soot. The house was damaged, of course, but it was built not to burn-fire retardent siding, fire proof roof, double paned glass, covered eaves and enclosed deck. The fire went over the house and down the hill to Millard's shop. We lost a life time collection of antique airplane parts, not insured, not replaceable. We fled the property at 4:30 a.m. It was a chilling feat. The fire was in front and behind us. We were not aided by any tax-supported agency. We made out better than many of our neighbors.

After the fire, the United States Fish and Wildlife Service, John Bradley, was in the local paper as saying the Domenigoni's could cultivate his fields that surround our property on three sides BECAUSE THE K-RAT WAS GONE, BUT NOT BECAUSE OF THE FIRE. RATHER THEY HAD LEFT BECAUSE THERE WAS TOO MUCH BRUSH FOR THEM. THEY DON'T LIKE TOO MUCH UNDERGROWTH. THEY DO BETTER ON CULTIVATED LAND. You see USFWS and Riverside County has done exactly what they threatened us not to do, disturb the k-rat habitat. They accomplished it by disallowing the management of our property.

My neighbor has cultivated hundred of acres and we, by consent of the USFWs may disc 100 feet around homes. INANE!!

We have attended meetings for property owners to communicate with the Riverside County Habitat Conservation Agency. After countless meetings, we have not once seen where the property owners concerns have made any difference in the actions of this Commission, or the County Board of Supervisors, or USFWS, Our property is in linbo while these bureaucrats accomplish nothing. They have destroyed our property value and now made the property uninsurable. This Endangered Species Act is run on caprice and ignorance. In our case, what worth is this rodent? Who decided man could improve on natural selection? Isn't that the process that developed these wonderful species that you are now trying to freeze in time and force to live on reservations in an unnatural environment controlled by man.

We believe we are entitled to the same protection as the animals. The ESA says "H. s" means an intentional or negligent act or omission which creates the likelihood of injuring wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited, breeding, feeding or sheltering" (50 CFR 17.3).

We also believe the California Fire-Winchester area could have been avoided had the lifornia Forestry Fire Department been managing the are .

Mulled Marin Margie a. Marris

August 16, 1994

Dear Sir:

This letter is in regards to the E.S.A. and the E.P.A. I live in the same valley as Mr. Yshmal Garcia, Miek Klimko, and Ken Tessier. I did not lose my home but was very much effected by the October 27th, 1993 fire that was called the Winchester Fire Storms. We did lose our garage and many personal items that will never be able to be replaced. All of this could have been prevented if the home owners in this valley could have disced or cleared their property without the thoughts of a fine and possibly being put into jail because of the K-Rat. There was a lot of open land before our homes that the fire could have been contained on. This land was not cleared because the families who farm this land were not allowed to clear or farm this property because of the Kangaroo Rat Habitat. This would have provided a natural land break for the fire, instead it only made the fire increase out of control and fuel on the uncleared land around our homes.

When the Kangaroo Rat was first listed, we, as homeowners were never notified of the listing. Therefore many of us had brought in this valley unaware that there would be restrictions put upon us concerning the use of our property. Finally, when we were notified of the listing and restrictions on this property, we were already aware because we had found out when we had tried to sell. One neighbor would tell another neighbor. At first we couldn't believe this. They felt we would already know because it was in the newspaper. Well, we live in a rural area and we don't receive paper delivery back then. Besides, we sure get notices in our mail boxes when the government wants to tax us on our property. This could have been added when our tax bill was mailed to us. Putting restrictions on our property is just as important and we should have been notified.

After those of us in the valley became aware of the Stephens Kangaroo Rat Habitat, my husband and I started attending many meeting concerning this problem. When the Kangaroo Rat was first listed as endangered it was not known that the Kangaroo Rat mates 5 times a year and when the third litter is being born the 1st litter is matting. These rats are multiplying by the thousands. There is also a rat known as the Pacific Kangaroo Rat that lives in this area also. The only way to tell the difference is to physicially hold one and look at the underside and there is a difference in a small hair where they go to the bathroom. This was explained to me by a Fish and Wildlife employee that sat next to me at one of the meetings. All the inspectors come out during the day to identify the rats and the burrows they live in and the rats hide during the day and only come out during the night. Tell me how the inspector can make a true identification of the Stephens rat verus the Pacific rat when most of the time they only see the burrows they live in. When the question was asked about the health issue in not being able to clear around our property if the rat was there, we got no response.

In the beginning, we were told not to clear even when the fire department had instructed us to. Now they say that wasn't true, we now can. You can bet that we as parents and homeowners are tired of listening to the Fish and Wildlife. We will put our families first, even if that means we may run the risk of a fine. We will not stand for what we went through with this last fire and we will do what we must to make sure that our families and homes are not endangered. We as humans are more important than all the rats in Southern California. They are even finding more Stephens Kangaroo Rats in areas that they were not aware that they lived, such as Anza and Corona. It really makes me angry when I think of the billions of dollars that have been spent to provide a safe harbor for the Kangaroo Rat when we have families here in our area that are without homes and jobs to provide for their families and our government allows this to continue. Its time that we as citizens become more important to those of you in office and something is done before another disaster happens. After all it is the people that elected you not the animals.

At one of the meetings my husband and I attended, there was a brochure handed out that showed the land between the new Domenigoni Reservoir being built and the Lake Skinner Reservoir. It stated that this land would be used for hiking, camping horseback riding, nature trails, etc. This land is the land where our homes stand. This brochure was published before anything was said to us to buy us or preserve it for the Kangaroo Rat Habitat. I pointed this out at the meeting that I felt this was what the developers of the Water District had in mind to start with and this was why our land in this particular area was included in the study area. It would be a cheap way for the development to tie into the development between the lakes. I was given no explanation. In fact they moved on as quickly as possible to the next question. We brought here in this valley, like many of our neighbors, because we like living in the county area and care about the many animals. Most of us all have horses, cattle, sheep, dogs, cats, rabbits, turkeys and chickens. We have enjoyed the owls out at night and our grandkids enjoy the rabbits at night, so we care about the animals but we don't go overboard and make these things more important than our families safety. We care about our neighbors and we intend to do whatever we can to convince the government to finally listen to us. We encourage you as part of our government to come out here to our valley and look at the area that is being effected. Think about this if this was your home and your family that was being effected.

The other issue that really makes me angry is that the developers that have the money to pay the fees can develop this land and not have the restrictions put upon them. I am sure there were Kangaroo Rats in the area where the new dam is being build and sure there were Kangaroo Rats in the neighboring area where all the homes are being developed. The rats don't just live in our area. They do cross the street and venture into areas that are not stated as a study area. My point is there is too much vacant land that belongs to the county along with the land donated by the water district to harbor the Kangaroo Rats to be bother with our land.

I sincerely hope that you will really listen to the many people that have taken the time to address this issue and hopefully take a look at the area already set aside for the Kangaroo Rat and see that they indeed are not really as endangered as first thought. We will do what is necessary to make our land safe for our families, even if that means discing the land and distrubing the burrows of the rats. I for one do not want to go through what we went through last year in the fires because most of our lands were not cleared and safe from fires. We only want the right to develop our land and make our homes safe for our families and hopefully if at any time we would have to sell, be able to get a fair price for our property after all the labor and love we have put into it.

I thank you for your time and assistance.

Marty Benjamin

33855 Sidney Circle Winchester, CA 92592

Marty Benjamin

(909) 926-2574

STATEMENT OF BOB BUSTER, SUPERVISOR, RIVERSIDE COUNTY, CALIFORNIA

Good Morning, Members of the Environment and Public Works' Subcommittee on Clean Water, Fisheries and Wildlife. I am Bob Buster, Supervisor from the First District of Riverside County, California. I represent an area of Southern California where the Endangered Species Act is on the minds of many people. With me is Brian Loew, Executive Director of the Riverside County Habitat Conservation Agency.

I want to commend you for inviting Riverside County to join this hearing on conservation on private lands. Riverside County stands at the forefront of implementation of the Endangered Species Act and I believe the Nation can learn from its efforts. In fact, your interest in conservation on public lands is of special interest to Riverside County since most of our conservation efforts involve small, non-glamorous species that live on lands held by numerous private landowners. Mr. Loew is with me today after just completing a new draft of the Habitat Conservation Plan for the Stephens' kangaroo rat.

I specifically have been asked to address Riverside County's response to the wild fires of 1993 in regards to the Endangered Species Act and conservation on public land. I will limit my comments to those areas but would be happy to entertain ques-

tions on any related issues.

On October 26, 1993, Riverside County had strong winds, record low humidity, and wildfires blazing in several locations. In fact, when we looked from the top of Riverside County's Administrative Office, we could see fires burning in all directions. One fire that received national attention was located within a Study Area for the Stephens' kangaroo rat, listed by the Fish and Wildlife Service as an endangered species. That particular fire, the "California Fire," saw 25,100 acres consumed, 30 homes and 77 outbuildings burned, and \$2.65 million in total property losses.

Since many of you may not be familiar with Southern California weather conditions, I should add a note about Santa Ana conditions. Santa Anas are very dry and very hot. The winds are surprisingly intense, sometimes gusting from the northwest

at 70 miles per hour. This was the case in October 1993.

I relate these details because you should know that during and just after the fire, I saw many structures that had burned. They were burned in a path of fire that simply could not be stopped by the best fire-fighting technology. Many have questioned if firebreaks of double or even triple the current standard would have prevented some of the structures from burning. Saving a home or other structure in this hilly, rural area often depended more on the presence and preparation of the owner and what materials were used in construction, rather than how or how much brush and weeds had been cleared. Fire officials reported that embers were carried such distances and in such dry conditions that it may have been impossible to stop damage to some structures even with the best clearing and fire-fighting techniques. Added to these many difficulties was the fact that many fires were burning at night and darkness hampered many efforts. The California Fire arose shortly after midnight and the winds fanned it like a furious blowtorch in the darkest part of the night, giving residents in its path virtually no time to protect their homes or to evacuate safely.

Riverside County, through its Fire Department, requires property owners to clear their property of flammable vegetation to avoid fire dangers. Additionally, in order to comply with requirements of the Endangered Species Act, Riverside County issued special notices prior to the October 1993 fire within Stephens' Kangaroo Rat Study Areas requiring that property be mowed instead of disked. Mowing, it was explained by the Fish and Wildlife Service, would not disturb the burrows of the

kangaroo rats and yet would eliminate vegetative fuels.

After the fires and the resulting property damage, many property owners charged that the mowing did not sufficiently reduce fuel loads or that mowing was physically impossible for them because of the rocky terrain of their property. They charged that property damage was more extensive because of the way the Endangered Species Act was implemented to limit the complete abatement of flammable vegetation. These reports were carried in the national news media and Riverside County was caught between the strict implementation rules of the Federal mandate protecting

the Stephens' kangaroo rat and our basic local responsibility of fire protection which, in remote rural areas such as the California Fire burned, really means working with the homeowner to afford him or her the knowledge and ability to prepare and protect effectively against such fires before firefighters can arrive. It also means that we establish better building code requirements for new structures in these high fire hazard areas, as Riverside County is also presently considering.

Many have questioned the degree to which there was increased damage to structures because of the restrictions made on vegetation clearance. I believe that we quite simply will never know the answer to that question. Conditions were such that embers were being carried far and wide of the actual fire. We also know, however, that increased fuel loads increased the likelihood of the fire spreading and that there will be more fires, fires for which even weed and brush stubble left from mowing could be a major contributor to loss of structures.

On December 6, 1993, Habitat Conservation Agency staff convened an ad hoc committee of local property owners, Agency member representatives and fire department personnel, and representatives of the U.S. Fish and Wildlife Service to develop a proposal for fire prevention activities in endangered species habitat. The consensus among fire experts was that adequate fire protection would be afforded if the Stephens' kangaroo rat Habitat Conservation Plan was modified to permit property owners to clear all flammable vegetation down to bare mineral soil within 100 feet

of structures.

The U.S. Fish and Wildlife Service indicated its support of such a modification, including a waiver of biological survey requirements for property owners conducting flammable vegetation clearance activities in Study Areas. The Service further agreed that the most expeditious way of handling this would be through an amendment to the existing section 10(a) incidental take permit.

The meetings with the Service very quickly lead to draft agreements on the necessary changes to County regulations. The question remained as to how those changes could be implemented. It was, in fact, the Service that recommended that a cooperative agreement between the Service and the Habitat Conservation Agency could accomplish the needed changes, avoiding the need for major changes in the

law or in regulation.

The California Fire in Riverside County should set a precedent which leads to sensible rules to carry out the Endangered Species Act which afford homeowners the ability to prevent fire damage and to protect themselves in fire emergencies. This can be done with minimal effect on sensitive habitat. My recommendation is that we make mandatory in the endangered species planning process, fire and other public safety considerations. Not to do so may put at unneeded risk not only the fire safety of life and property, but also our ability to gain public acceptance of the Endangered Species Act even where it does not impinge on inhabited private lands.

## STATEMENT OF NED MEISTER, DIRECTOR, TEXAS FARM BUREAU

Mr. Chairman and Members of the Committee, my name is Ned Meister. I am the director of Commodity and Regulatory Activities for Texas Farm headquartered in Waco, Texas. Texas Farm Bureau is a general farm organization with producer members in most Texas counties.

I appear before you today to offer our views on conservation efforts of private lands relating to the reauthorization of the Endangered Species Act. The reauthorization should include protection for individuals' constitutional right of private property ownership, provisions for compensation when a "takings" occurs, a requirement for an economic impact analysis that would determine the feasibility of any listing and/or implementation of regulation, and economic incentives to landowners when government action is taken.

Today, government actions are imposing an increasing amount of restrictions on privately owned farms and ranches. Endangered species, wetlands, clean water initiatives along with other programs are adding costs to production agriculture that can only be internalized. There is no guarantee that the market forces will return

the costs brought about by these actions.

Landowners have experienced or have heard the horror stories associated with the presence of-an endangered or threatened species. They live in fear that a listed species or a species that may be listed in the future may be found on their land. They fear that the presence of a listed species will cost them their land, their livelihood, and their dreams. There is no positive incentive for landowners to be encouraged to assist in the preservation or recovery of endangered or threatened species. This is the opposite of the true nature of farmers and ranchers who have a deep appreciation for environmental stewardship, an appreciation that has been the backbone of their livelihood and their way of life.

Today Texas Farm Bureau suggests to this committee an incentive plan that will help the conservation effort for endangered and threatened species on private land. It is a voluntary plan that will enlist private landowners' help in the conservation effort. The plan provides for economic incentives that would mitigate landowners economic losses that they currently face. It is a plan that will foster landowners cooperation and help calm the fear associated with the current Act. History indicates that incentives will do far more to achieve our stated goal of the preservation and propagation of endangered plants and animals.

Mr. Chairman, what we propose to your Committee today is a program which is similar to the Conservation Reserve Program operated by the U.S. Department of Agriculture since 1985. The purpose of that program is to protect and preserve highly erodible land. I might add that the CRP has proven highly successful by enrolling farmers in this voluntary program. The Wetlands Reserve Program is another example of a voluntary program that illustrates farmers' willingness to participate in con-

servation efforts.

The Critical Habitat Reserve Program, would consist of a 5 year contract between the Department of Interior and individual landowners. As proposed, the contract is subject to renewal as long as the species is threatened or endangered. We would propose that the program be voluntary, with producers submitting bids for the approval of their contracts just as is currently practiced under the CRP.

Under the proposed contract, landowners would be required to implement an approved recovery plan and restricted from any unspecified use of the property. Periodic inspections by appropriate officials would insure compliance with the plan. Violation of plan agreements could result not only in forfeiture of benefits but assess-

ment of penalties as well.

Our recommendation would be that these contracts call for the lease of the property by the Federal Government rather than an easement. The more responsibility the individual landowner has, the better he or she can be expected to perform. Obviously, in addition to inspection visits, an oversight responsibility would be necessary.

The USDA has a history of providing incentives to producers and any new pro-

gram should be coordinated with that agency to best assure success.

Mr. Chairman, American farmers and ranchers have made this Nation the "bread-basket" of the world, providing its citizens with the most abundant, safest, most inexpensive food supply in the world. With all due respect, if this committee wishes to preserve a species, be it plant or animal; farmers and ranchers, with proper incentives, can do it.

In the interest of time, attached is a copy of the overall Critical Habitat Reserve Program for the record, and thank you for allowing me to present this testimony

today. I will answer any questions you might have at this time.

### TEXAS FARM BUREAU, JULY 1994

## ENDANGERED SPECIES PRIVATE LAND CONSERVATION AND PROTECTION PROGRAM

I. Purpose

A. To develop a voluntary cooperative effort between the U. S. Fish and Wildlife Service and cooperating private landowners for the establishment of Critical Habitat Reserves (CHR) to protect Threatened and Endangered Species.

B. Protect Constitutional property ownership rights of private landowners.

II. Critical Habitat Reserve (CHR)

#### A. General Provisions

1. The Secretary of Interior (Secretary) will contract with cooperating land-owners/operators to provide Critical Habitat (CH) and landowner/operator management of the CH for the protection of Threatened and Endangered Species.

2. No more than 25 percent of the land mass or water bodies in any one county will placed in a CH reserve unless additional areas would not have an ad-

verse effect on the local economy.

3. Contracts will be for 5 years and renewable only if the presence of a Threatened or Endangered Species exists.

## B. Duties of the Secretary

1. In return for a contract, the Secretary shall:

a. Provide for the cost of carrying out the CHR Program.

- b. Pay annual rental and management fee during the term of the contract to the landowner/operator for the conversion of private property uses to the CHR.
- c. Provide technical assistance and management training to cooperating landowners/operators through the U. S. Fish and Wildlife Service.

d. Consult with the Secretary of Agriculture to insure that the program is harmonious with programs of the U.S.D.A.

## C. Payments

- 1. The Secretary shall provide payment for obligations incurred:
  - a. With respect to the cost of CH preparation.
  - b. With respect to management fees.
  - c. With respect to annual rental:
    - (1) Upon the signing of a contract with a landowner/operator and on each anniversary date of the contract.
  - d. The amount of rent shall be determined by a rental bid from the landowner/operator.
    - e. Payments shall be made in cash.
  - f. Endangered Species CHR Program shall not be subject to payment limitations.
  - g. Payments shall be independent of any other payments on the same land or waterbody.
- 2. The Secretary shall provide payment for lost revenue to local governmental entities as a result of CR designation:
  - a. With respect to revenue paid "in lieu of taxes" to local governmental entities from the sale of timber from National Forest lands.
  - b. With respect to revenue paid to local governmental entities derived from the lease or rental of grazing rights on Bureau of Land Management lands.

#### D. Contracts

- 1. A contract shall continue in force for the 5 year duration.
  - a. If land ownership/operator changes occur during any contract period, the new landowner/operator may enter into a new 5 year contract period on the anniversary date of the contract in force at the time of the acquisition if the presence of a threatened or endangered species exists.
- Contracts shall not prohibit any agricultural use of land or of a water body placed in the CHRP unless that use is proven by sound scientific basis to jeop-

ardize the existence of an endangered or threatened species.

- 3. The Secretary may modify a contract only if the owner/operator agrees.
- 4. The Secretary may terminate a contract only if the owner/operator agrees.
- 5. Public access shall be allowed only if the landowner/operator agrees and the agreement is openly stated in the contract.
- 6. Contracts shall be in lieu of statutory recovery plans for the same species on the same land or water body.

#### E. Duties of Landowners/Operators

- The landowner/operator must agree:
  - a. To implement an approved CHR plan.
  - b. Not to use CHR land for purposes other than those provided for in the contract.

c. To periodic inspections to determine compliance with the contract.

d. On violation of a term or condition of the contract:

(1) Forfeit all rights to rental and management fees and refund payments with interest to the Secretary; or

(2) To refund or accept adjustments to rental and management fees; and

(3) The Secretary will determine if the violation should or should not warrant termination of the contract.

F. Special Provision

1. Crucial Critical Habitat (CCH)—A site specific habitat without which a

threatened or endangered species could not survive.

a. If a landowner/operator and the USFWS are unable to agree on program participation in areas that are determined to be CCH, an arbitration panel knowledgeable of the value of the CCH in relation to the survival of the species, shall resolve the differences between the landowner/operator and the USFWS.

## III. Overall Administration of the Program

A. Responsibilities of Congress

1. Appropriate funds to adequately carry out the program.

B. Responsibilities of Federal Agencies

1. U. S. Fish and Wildlife Service (USFWS)

a. Develop accurate scientific data for the determination of threatened and endangered species and critical habitat.

b. Develop critical habitat boundaries based on current actual range of the affected species.

c. Provide technical assistance and management training to cooperating landowners/operators.

d. Conduct public hearings concerning proposed CHR designations and provide public notice through the Federal Register and local newspapers.

e. Notify each affected landowner/operator of the proposed CHR designa-

tion by registered mail.

f. Make inspections and evaluations of the progress of each privately managed critical habitat.

2. U. S. Department of Agriculture

a. Assist USFWS with boundary delineation of agricultural land. b. Provide CHR planning to maintain soil and water integrity.

c. Review proposed CHR to prevent conflicts with current U.S.D.A programs.

d. Review contracts to insure acceptable agricultural land and water

management practices are followed.

3. U. S. Department of Labor

a. Provide a retraining program for persons displaced from jobs as a result of CHRP designations.

C. Responsibilities of State Agencies

1. State Fish and Game Agency

a. Assist USFWS with technical assistance and training for cooperating landowners/operators.

2. Land Grant Universities

a. Develop training and educational materials for the CHR managers.

3. State Soil and Water Agencies

a. Assist U.S.D.A. with CHR planning to insure soil and water quality. D. Responsibilities of Local Governments

1. County property appraisal agency.

a. Develop an equitable method of appraisal for land entered into the CHRP.

IV. Administration

A. Final CHR determinations shall be made jointly by the Departments of Interior and Agriculture.

B. The Secretary of Interior shall develop an appeal procedure for persons adversely affected.

- 1. Persons affected would be those who could:
  - a. Show infringement on their private property rights.
  - b. Show substantial economic harm as a result of a CHR designation.
- C. The violation of a contract by one operator shall not effect the contracts of other operators of land of a common landowner.

D. The interests of, in any single contract, shall be protected with respect to the sharing, on a fair and equitable basis, of the rental payments contracted for in the CHRP.

## STATEMENT OF MARK A. SUWYN, INTERNATIONAL PAPER

Mr. Chairman, I'm Mark A. Suwyn, Executive Vice President, Forest and Specialty Products for International Paper. Thank you for the opportunity to appear today on behalf of International Paper and to present our company's views on the Habitat Conservation Planning process and several key views we have that we would like to present to you as you discuss re-authorization of the Endangered Species Act (ESA).

International Paper, the 31st largest industrial corporation in the U.S. located in Purchase, New York, is a worldwide producer of a variety of paper and forest products. Founded in 1898, International Paper is the world's largest forest and paper products company, with over \$13 billion in sales. The company is the second largest private landowner in the U.S. with more than 6 million acres of forestland in the Southeast, Northeast, and Northwest. We also have land holdings in New Zealand and Chile. We have more than 1,500 employees involved in forestland management and employ more than 75,000 company-wide. The company also operates specialty products businesses and distributes paper and wood products. International Paper has manufacturing and converting operations in 27 countries and exports products to more than 130 nations.

International Paper has a long and distinguished history of dealing with endangered species dating back to our early involvement with the red-cockaded woodpecker. We have not just been involved with the more notable species such as the bald eagle, spotted owl, and Louisiana black bear but also with less notables like the ringed sawback turtle, Red Hills salamander, gopher tortoise, bayou darter, and pond berry. Currently we have 12 federally listed animals and one endangered plant on our land. We recognize these species as important features of the landscapes and accept responsibility for their management.

International Paper believes that natural resources can be managed in a way that perpetuates ecosystems and does not contribute to an unnatural rate of species decline. The Endangered Species Act is being used in some places by special interest groups to prevent certain beneficial land uses, not to conserve viable populations of species. International Paper encourages Congress to ensure a thorough and rigorous review of the Act's performance, and to take steps to make it a more effective and constructive tool.

I'd like to discuss some specific aspects of the proposed re-authorization with you today and some thoughts International Paper has for your consideration during the Endangered Species Act debate:

First, a review of what has worked, how we have been able to work within the process, and what we learned from that experience;

Second, a review of the problem areas within the ESA; and

Third, a discussion of recommended changes in the statute that will make it more effective in accomplishing its objective.

## Working with the Endangered Species Act

Notable successes have resulted from ESA activities. The Interior Department recently announced it was upgrading the status of the American bald eagle from endangered to threatened. The American alligator has also made a remarkable comeback.

Our involvement in endangered species management has evolved since the Endangered Species Act's inception. Our early activities centered around land set

asides and donations. However, over time we have taken a much more active role

in endangered species management.

The Indiana bat is an example of our evolution towards more active management. In 1992, International Paper and the Adirondack Chapter of The Nature Conservancy formed a unique partnership that will accomplish three conservation goals: the protection of over 1,900 acres of productive timberlands at Hague Mountain in northern Warren County, New York; creation of an assured, undeveloped buffer zone of the Pharaoh Lake Wilderness Area; and the perpetual protection of the largest winter home for bats, including the endangered Indiana bat, in the northeast. This area has several roosting caves—actually abandoned mines. By controlling access to these mines, disturbance to this endangered species is minimized.

There are clearly cases where land management objectives are not fully compatible with species management. This has been our experience with the Red Hills salamander. This requires knowledgeable compromise to ensure adequate protection at

minimum degradation of the land's economic value.

International Paper owns approximately 570,000 acres of forestland in South Alabama. About 30,000 acres in Monroe and Conecuh counties, located 100 miles northeast of Mobile, are within the Red Hills salamander's historic range. In 1977, International Paper, cooperating with U.S. Fish & Wildlife Service (FWS) biologists and Auburn University scientists, developed internal company management guidelines for the salamander. Using these guidelines, our foresters set aside 7,000 acres that resembled salamander habitat and halted all logging and harvesting activities in the area.

Three years ago the company initiated a cooperative approach with biologists from the FWS to develop a Habitat Conservation Plan (HCP) to preserve the salamander and its habitat. To complete this project it was necessary to survey the 30,000 acres to determine exactly what could be classified as salamander habitat. Once classified, management strategies were developed to protect the highly populated salamander habitat while allowing forestry activities in other, less populated areas. Following a Federal Register notice, numerous reviews, both internal and public, the HCP was approved by FWS Region IV on October 19, 1994. International Paper jointly announced the successful completion of this plan with Secretary Babbitt on November 16, 1994.

Approximately 6,400 acres were identified as suitable salamander habitat. About 4,500 acres were identified as optimal and have been set aside and preserved in its natural condition. The incidental take permit resulting from the HCP will allow forest operations on 1,900 acres of marginal habitat, as well as non-salamander habitat inclusions within the 4,500 acres. United timber harvesting activities will be conducted within 50 feet buffers maintained above and below the optimal habitat areas.

The Red Hills salamander HCP completed by International Paper was the first developed by a forest products company in the South. It demonstrates a commit-

ment to integrate forestry and endangered species management.

We are presently involved in the development of a HCP for the gopher tortoise. The gopher tortoise is an example of listing an animal in only a portion of its range, in this case, west of the Mobile and Tombigbee rivers in Alabama, Mississippi, and Louisiana. Gophers found east of these rivers are identical and numerous, ranging across Alabama, Georgia, and Florida. The proposed development of this plan is endorsed by the FWS and its completion is expected by April 1995. This plan has the potential to impact more than 100,000 acres. Following extensive population surveys, management strategies will be developed that incorporate gopher tortoise ecology with forest management activities.

Our experience with the HCP process gives us the opportunity and insight to be both a supporter and a critic. The process has been both satisfying and frustrating.

Satisfaction came through the collaborative steps involving the FWS, environmental organizations, public review, and our own corporation. With no conflict or costly litigation, we achieved this prime example of sustainable development: We expect to derive revenues from our property with no jobs lost or local economies disrupted; the threatened Red Hills salamander is protected; and all of us were spared the stew of public controversy that surrounded the snail darter and the northern spotted owl.

Frustration came from the outlay of substantial sums of money to pay experts to complete the plan. Lawyers, scientists, and consultants were involved to help us understand the process, complete the field work, and develop the plan.

Problems Associated With Endangered Species Management

The FWS expands their authority beyond the limits established by current regulations. In 1978, the Supreme Court stated in the Tellico Dam-Snail Darter case: "The balance has been struck in favor of affording endangered species the highest of priorities." With this philosophy, the FWS has been pushing the limits of its authority. In a recent example, the agency prepared a biological opinion on the issuance of three permits by the Tennessee Valley Authority (TVA) to construct barge facilities on the Tennessee River. However, the FWS did not confine its review to the effect of the facilities but rather expanded the review to include a 75 mile radius sourcing area, which includes 42 counties, 6.6 million acres of harvestable timber on over 100,000 private landowners. Despite knowing neither the effectiveness of existing regulatory requirements nor the extent, timing, or location of harvesting activity, the FWS found jeopardy to a number of species. As an alternative, the FWS recommended permit conditions that allowed barging only products harvested under specified mitigation measures in excess of existing State and Federal regulations. The TVA ultimately rejected the permit applications.

Second, existing law does not ensure the use of best science nor requires adjustment due to better science. The FWS listed a subspecies of black bear in Louisiana under the ESA in 1992. Taxonomists designated this bear population as a "subspecies" in the nineteenth century because it had better "moral character" and because measurement of five skulls suggested a different size. The agency refused to accept modern DNA testing that clearly showed no genetic difference between this population of black bear and others. Despite this, the bear remains listed today. Similar difficulties have arisen over the attempted listing of the Alabama sturgeon where broadly different scientific opinions exist as to it's very existence.

Third, ESA implementation has demonstrated conclusively that the current law is incapable of protecting all endangered and threatened species. There are over 1,300 species, subspecies, and vertebrate populations worldwide listed as endangered or threatened under the ESA. Over 3,500 more are official candidates but do not have a priority high enough to undergo the listing process or to warrant additional study. The Interior Department estimates it would take nearly 50 years and \$114 million to review and list current official candidates. The Department estimates another \$4.6 billion for recovery of current listed and candidate species. Meanwhile, Federal officials must review numerous petitions each year to list additional species, subspecies, and populations.

Fourth, the ESA does not provide private landowners the same relief from ESA regulation as it does Federal agencies. The statute provides a 90-day consultation process for Federal agencies to analyze the effects of a proposed action on a listed species as a whole. For private landowners, instead of a collaborative discussion process, the ESA establishes a permit process that requires the landowner to prepare an HCP, subjecting it and themselves to a public review, deal with those comments pretty much on their own and hope they end up with a valid plan. The definition of take is usually fuzzy and subject to endless negotiations.

The HCP process, as currently structured, is difficult to the point that it automatically excludes about 70 percent of the lands in the Southeast. Unlike the Pacific Northwest where millions of acres are owned by Federal and State governments, most land in the Southeast is privately owned by nonindustrial landowners (families and small businesses) in small tracts. For them the habitat conservation program is too expensive and confusing; and they have no idea what it takes to protect a species.

A conscientious, small landowner-forester who tries to protect endangered species has several unattractive options. He can spend a lot of money for a habitat conservation program, which will usually result in harvest restrictions. Or he can totally shut down the land where the species exists, completely forgo any income, but continue paying taxes. The third course is to pass on both options and cut his trees before anybody finds out there's threatened or endangered species underfoot.

International Paper's good results in the HCP process have been possible only because our large corporation can afford to invest in the future. The process just doesn't work for small landowners because of its costs and inflexible, open-ended nature.

Improving the Endangered Species Act Efficacy

Concerns expressed by all parties—industry, environmental community and others—involved in the endangered species debates are many and varied. However, detailed analysis of these issues reveals many similarities. This holds true for the legislation being proposed to re-authorize the ESA We are active members of the Endangered Species Coordinating Council and were an early supporter of H.R. 1490, the Tauzin/Fields Bill in the House and S. 1521, the Shelby/Gorton Bill here in the Senate. Frankly, upon review, there are more similarities between these two pieces of legislation and H.R. 2043, the Studds Bill and 5.921, the Baucus/Chafee Bill then there are differences. All the bills raise the same concerns with the present Act. All that's different are the solutions proposed. Our challenge is to find common ground and build upon it to improve the ESA so it can accomplish the original purpose Congress intended—to prevent species from becoming extinct. To this goal International Paper has identified two key hurdles that must be overcome: 1) limited private land involvement and 2) legal and political uncertainties surrounding the ESA.

The contribution made by private lands to endangered species is often overlooked or discounted. The eastern United States, especially the South, is primarily privately owned. Ninety-one percent of the forested land in the 13 southeastern states is privately owned. In Florida where 89 species are listed as federally endangered, 84 percent of the timberland is privately owned. It is obvious that if many of these

species are to recover, private lands must play an important role.

How do we do this? We must take away the fear private landowners have of discovering a listed species on their properties. This fear is fueled by horror stories, some true, some not, about people losing all the economic value of their property. Flexibility must be worked into the ESA that allows landowners to retain their properties and use them to meet their objectives while accommodating or enhancing any listed species they might have. We currently do not have this flexibility.

Flexibility can be blended into the ESA several ways.

• Make consultations similar to those for Federal agencies available to private landowners.

 Revise the HCP process so that it is available to all landowners, not just those who can afford it.

• Make enhancing endangered species populations an economically viable option for landowners by creating incentives for proactive management.

• Create a system for landowners who have exhausted all the available options and are still unable to meet their objectives to recoup economic losses that

result from ESA compliance.

We applaud Secretary Babbitt's recent administrative changes to the EST The changes, if implemented as described, will be positive changes for the Act and should address some of the issues mentioned above. However, there is concern that without the necessary changes in the statute, these changes to the ESA are not very secure. Change the Act to prevent the positive moves made by Secretary Babbitt from being eroded by subsequent Secretaries.

Following are the specific issues International Paper would like addressed during

the re-authorization process and a brief explanation of each:

• Redefine the Habitat Conservation Plan process to enhance and encourage land-

owner participation.

HCPs were included in the ESA with the understanding that private lands would be involved at certain times and that all legal land management options could not be precluded in the name of protection of endangered species. HCPs have been less effective than they could be due to the cost, all-inclusive nature, inflexibility, and open-ended nature of the process.

Private landowners need a process that closely resembles the section 7 consultations conducted on public lands. This would enable the landowner to develop a man-

agement plan, have it reviewed by the FWS and, if no jeopardy was determined, be able to continue with their land management activities.

• Ensure that only true species are listed except in rare cases where unique subspecies or populations isolated by distinct geographical barriers are endangered.

Current law allows the listing of a species, subspecies, or population throughout all or part of its range. This expansive definition has been used to list subspecies

and species populations that are still generally abundant.

The current controversy surrounding the proposal to list the Alabama sturgeon as an endangered species highlights this problem. The Alabama sturgeon was designated as a new subspecies in 1990. This designation has been challenged by several respected ichthyologists who say the data presented is not sufficient to differentiate between the Alabama sturgeon and the common Mississippi shovelnose sturgeon found in the Mississippi River drainage. The only sturgeon captured in the Alabama River by the FWS within the last 8 years was found to be genetically similar to the shovelnose sturgeon. Even though this genetic test was conducted by FWS scientists, they still maintain the Alabama sturgeon is a separate subspecies and are continuing with the listing process.

Modern scientific techniques, such as DNA testing, are available to better answer many of the "species" questions and should be used. We should not rely only on historic evaluations based on a limited number of specimens when better data are

available.

 Ensure that the best available data are used to make listing decisions, that new data are considered when available during the listing process, and that all data are

reviewed and verified by non-agency personnel.

In reviewing a species for possible listing, the FWS is required to use the "best available data," but no scientific checks and balances exist to ensure this is done. Because of the very nature of species usually considered for listing, long-term, intensive research is required to answer life history and habitat relationship questions. Once the listing process is begun, it is very difficult to get new or ongoing research results into the process. The northern spotted owl is an example. New data seem to indicate that the owl might not be as dependent on old growth forest as once believed, but these data were not fully incorporated into the listing process.

There is no mechanism for peer review outside the listing agency. This should be corrected to allow a wider cross-section of the scientific community to review data

used during the listing decision.

• Place minimum standards on the quality and quantity of data used for listing, critical habitat designation, and recovery plan development and require appropriate research be conducted when these standards are not met.

Data used during the listing, critical habitat designation, and recovery plan development processes should meet certain scientific quality standards. As mentioned earlier, the nature of most species considered for listing, requires long-term research be conducted to determine critical habitat and recovery requirements. Because of the difficulties involved in wildlife research, oftentimes little is known about the species prior to the listing decision. Data standards should be set and appropriate mechanisms put into place to conduct research if there are insufficient data.

Recognize that designation of critical habitat should be only that necessary to
conserve viable populations, that it may require special management considerations
or protection, and that its designation must be subject to non-agency peer review.

Critical habitat is that habitat which is "essential" to the protection of the species, but the FWS does not hold to the "essential" standard. Most listed species have no recommended critical habitat. Where FWS has recommended critical habitat, as with the northern spotted owl, they originally suggested all *suitable* habitat within the bird's range; clearly not all could be "essential." (The final ruling on critical habitat included only Federal land.) Additionally, if habitats are incorrectly identified and included as critical habitat, no process exists to correct the error.

Critical habitat should go through the same professional peer review process as listings. Additionally, only currently occupied habitat should be considered. Other areas could be identified for recovery, but this should be left to the recovery plan

process and should only include Federal lands.

 Compensate private landowners when incurring mandated management costs to maintain listed species. Create incentives to encourage proactive management for listed species on private lands.

No mechanism exists to compensate private landowners when they alter their management practices to accommodate endangered species. There is only the threat of punishment for taking the species. Species listing and critical habitat designation can render some lands almost valueless. The mechanism should exist whereby the species could either be moved or reasonable management plans developed that would allow significant economic latitude in the management of private land. If these options are not available, the agency should compensate the landowner for all rights forfeited.

If incentives were available to make management for endangered species on private lands economically attractive, landowners would be much more likely to have a positive, proactive approach towards this entire issue. Incentives could be cost share programs, tax credits or mitigation credits that could be sold or traded to

other landowners.

Establish well-defined recovery goals and reviews so that down or delisting can

begin once these goals have been met.

The agencies have not kept pace with developing recovery plans and goals for species listed. Also, even after some species such as the bald eagle reach all goals, the agencies are reluctant to seek down- or de-listing. The agencies should establish clear recovery goals when final listings are made. When these goals are met, automatic time frames for review and down- or de-listing should be triggered.

 Recognize the importance and value of private property rights and that private landowners should not bear all the expense of species management or recovery.

The ESA states that private landowners must not "take" threatened and endangered species but they have no responsibility for recovery. However, when private land is included in the critical habitat or when management guidelines developed during the recovery plan process are imposed on private land, private landowners become responsible for species recovery. If this is required, then just compensation should be awarded. Private landowners should have no responsibility to recover a listed species except as agreed to by management agreement, conservation easement, or other willingly assumed responsibilities.

 Recognize that species extinction is a natural process; therefore, priority should be given to species with a realistic chance for recovery thereby ensuring the Act's fundamental purpose of conserving viable populations of threatened and endangered

species.

Species extinction has always been and will continue to be a natural process. Millions of dollars are spent each year in efforts to conserve species population fragments, when a viable population exists elsewhere. When a species or population cannot be recovered, money should be redirected to species that have a realistic chance of recovery. For example, the U.S. Forest Service is required by law to spend thousands of dollars each year to maintain a red-cockaded woodpecker colony site on a Tennessee national forest that contains only one male bird. A mechanism is needed to direct those dollars to colonies with a realistic chance of recovery.

In conclusion, let me emphasize that, like other industrial foresters, International Paper buys more than half of the timber it uses in its mills from small landowners in the Southeast. We are a big company with significant assets. Multinational corporations will indeed benefit if the Endangered Species Act is modified to help small landowners. But this is far more than a special-interest plea. The greatest relief will be for thousands of small businesses and landowners, for any endangered species, and for consumers of the forest products that are now endangered by faulty regulation. Small and large businesses will benefit by a streamlined, more workable Endangered Species Act that recognizes all the species, including humans species and the many businesses and jobs that feed them, are under threat of survival.

International Paper has hundreds of professional foresters and biologists whose job is to do the best they can to maintain the forest in a condition to produce wood products needed by society while keeping the same forest suitable for other inhabitants, such as endangered species. We see an effective Act will help to this. What

we currently have doesn't do it. International Paper feels the changes we have proposed will make it better for everyone.

Thank you, Mr. Chairman. I'd be pleased to answer any questions that you or other members of the committee have.

# STATEMENT OF HANK FISCHER, DEFENDERS OF WILDLIFE

Thank you, Mr. Chairman, for the opportunity to address the Committee concerning the conservation of endangered species on private lands. Improvements to the Endangered Species Act (ESA) in this area offer more opportunity for significant advances in the conservation of biodiversity than any other. Moreover, improving the law by offering incentives to private landowners will do more to address the concerns of ESA critics than any other action.

Why are private lands so essential to endangered species recovery? First, most lands in the United States—more than 60 per cent—are privately owned. Second, since private lands contain the richest and most diverse habitats—including rivers, streams and wetlands—they are hot spots for species richness. Finally, there is one pivotal fact everyone needs to know: approximately 50 per cent of the more than 700 currently listed threatened and endangered species occur exclusively on private

If we are serious about ecosystem management, we need an ESA that encourages wildlife conservation on private land. In states with little public land—like many of our eastern states-ecosystem management can not get to first base without private landowners. In states with large amounts of public land, it can not get to home plate. In the Northern Rockies, even though we have large, relatively intact ecosystems comprised primarily of public lands, private lands are absolutely essential to endangered species recovery. Take grizzly bears, for instance. Private lands not only provide critical spring range, they provide vital habitat linkages between populations.

I have been actively involved with endangered species issues in the Northern Rockies for more than 16 years. During that time, my organization has participated in the standard array of strategies to recover endangered species: we have petitioned for listings, participated in the development of recovery plans, urged agencies to implement those plans, and filed lawsuits when they did not. This regulatory approach, while it has had its rocky spots, has been largely successful on public lands.

Experience convinces me that endangered species recovery on private lands will require a fundamentally different approach. We cannot succeed solely by compelling landowners to obey an ever-stricter law. After years of debate it's clear that the sanctity of private property rights are held just as dearly as the national desire to prevent extinction—both in the public's hearts and minds and in our laws. We must avoid pitting endangered species protection against private property rights. We cannot succeed with species protection on private lands unless landowners want us to.

While it's important to avoid conflict with private landowners, we must not dodge the species preservation problems. We have all heard loud and often from those who say the ESA is not working for people on private land. But it is just as true that the ESA is not working for wildlife on private land. An effective Endangered Species Act must work for all parts of an ecosystem, people and wildlife included. An effective ESA must work on private lands as well as public lands, and it must include

incentives for private landowners.

Defenders first began experimentation with providing incentives to private landowners in 1987 when we developed a program to compensate livestock producers for verified livestock losses to wolves in the Northern Rockies. Over the last 7 years, we have paid approximately \$16,000 to 17 different livestock producers. But this modest action has had an impact disproportionate to the amount of money we have spent. By shifting economic responsibility for wolf recovery away from private landowners and toward the millions of people in this country who support wolf recovery, we have reduced polarization and helped quell controversy. That has been good for people. But it has also been good for wolves-populations have been increasing at a 20 percent rate for the last several years.

Despite the success of this program, we recognize its built-in limitations. No matter how effective we are at compensating livestock producers, the best we can do is make the economic impact of wolf recovery neutral. Therefore, in 1992 Defenders launched a new program designed to make wolves an asset rather than a liability. We call it our Wolf Reward Program, and we pay \$5,000 to any landowner in the Northern Rockies who successfully has wild wolves breed on private lands and raise the pups to adulthood. We made our first award in 1994.

Our incentives efforts have brought us in contact with some of the nation's leading economists and endangered species experts. We have been encouraged by the number of people who are thinking about incentives and who have specific incentive-based solutions to endangered species problems. We decided it was important to share this information with the public and with Congress, so in late 1993 we published "Building Economic Incentives into the Endangered Species Act". It contains

specific incentive ideas from 14 of the country's leading experts.

The four major incentive approaches can be broken down into four areas: voluntary programs, trust funds, credit trading programs and tax incentives. I will append a sheet to this testimony that summarizes these areas and gives examples.

Our publication demonstrates that incentive-based approaches for conserving endangered species on private lands are ready and waiting. What needs to happen next? First, Congress must authorize the Secretary of the Interior to begin developing incentive programs for private landowners. Second, Congress must provide

funds so the Secretary can do the work.

S. 921, introduced by Senators Baucus and Chafee, takes both actions. Moreover, it offers a far more reasoned and comprehensive approach to incentives for private landowners than the Shelby Bill (S. 1521). The Shelby bill does offer incentives to landowners, but it strips away the ESA's protective measures at the same time. We are convinced that building incentives into the Endangered Species Act will be the most significant change to the law during the current reauthorization process, and we look forward to continuing our work with Congress and the Administration.

Thank you.

#### ATTACHMENT

# INCENTIVE APPROACHES FOR ENDANGERED SPECIES MANAGEMENT

# Voluntary Programs

Voluntary programs rely on the fact that many private landowners are willing to take actions to conserve threatened and endangered species if they are provided specific information on how to do so. Wisconsin has a State program called the Landowner Contact Program that was started in 1991. Since its inception, at least 57 landowners become involved. On the Federal level, the National Natural Landmarks Program encourages landowners to enter into voluntary agreements to protect the values that gave the site its significance. This could include endangered species protection.

Seeking voluntary compliance to conserve endangered species is a low-cost program that has been tried very little. It is an area where State governments could take the lead. This approach should work best with rural landowners and with species where small numbers of landowners are involved.

cies where small numbers of landowners are involved.

# Trust Funds

Trust funds operate by creating a reward system for private landowners to conserve species. The fund is typically used to either buy protection for the species or protect habitat. Like Defenders' Wolf Reward Program, the goal is to make con-

servation of the species an asset rather than a liability.

Trust funds can be private or public, large or small, geared toward one species, toward a community of species, or toward land acquisition. Several authors in our publication proposed the creation of a large government trust fund designed to provide financial incentives for private landowners with important endangered species habitat. The trust fund approach can work effectively and simply with species-specific projects. It has strong potential for small, rural landowners where the amount of incentive necessary to achieve species protection may be relatively small.

# Credit Trading Programs

Credit trading programs allow groups of affected landowners to buy conservation credits from other landowners in order to mitigate proposed developmental activities. This is analogous to air pollution credit trading systems. Such systems have already been proposed under the Natural Communities Conservation Planning process in California and for red-cockaded woodpecker habitat in the southeast.

Credit trading programs have their greatest potential in areas with multiple landowners where Habitat Conservation Plans are involved. One such plan outlined in our publication involves the Kern County Valley Floor HCP in Kern County, California. This plan utilizes principles of conservation biology to help determine land val-

ues and thus trading credits.

This approach will work most effectively in urban areas where there are large numbers of landowners. While such a system can be complex, it promises certainty for developers and strong potential for maintaining biodiversity on private land.

#### Tax Credits

Tax credits and other fiscal incentives could provide very powerful motivation to conserve endangered species. This area includes tax credits for management of endangered species habitat as well as reductions in capital gains taxes if easements were provided to protect habitat. Also, this could include the modification of existing incentive programs—like the Conservation Reserve Program-in order that priority was given to protection of habitat important to endangered species.

Tax credits potentially offer the most effective and pervasive kind of incentive. At the same time, because they are so far-reaching, tax credits will require more study before they can be implemented broadly. Determining how much incentive is nec-

essary to achieve a desired result will take experimentation.

We believe it is also important to create financial disincentives for the conversion of significant pieces of habitat important to threatened and endangered species. It has been suggested that the revenue lost by creating incentives could be replaced by revenue gained by making people pay for habitat destruction.

STATEMENT OF MICHAEL J. SPEAR, REGIONAL DIRECTOR, PACIFIC REGION, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

Good morning Senator Graham, members of the Committee, my name is Mike Spear. I am the Fish and Wildlife Service's Regional Director for our Pacific Region, which includes the Northwest states, California, Nevada, and the Pacific islands. I recently transferred to our western region after 2 years as the Assistant Director for Ecological Services in our Washington Office, where I had oversight responsibilities for the national endangered species program. I am pleased to be here today, and I thank you for this opportunity to share with you the Fish and Wildlife Service's (Service) perspective on how the Endangered Species Act (ESA) relates to primate lands and private landowners. This relationship is critical to the effective implementation of the ESA in general and, in many cases, is pivotal to the achievement of our shared goal of recovering listed species. We must not forget that the ESA was passed in 1973 as a result of the public's recognition, and subsequent Congressional action, that loss of species to extinction cannot be tolerated. We must remain true to the public's desires for conservation of these species while affecting a program that keeps the public in the formula for success. I'd also like to take this opportunity to report on the status of several initiatives we are undertaking both to encourage private landowners to participate in recovery actions and to help landowners comply with the ESA when their property provides habitat for listed animals or plants.

#### Background

The purpose of the ESA is to identify species of plants and animals that are in danger of extinction, to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved and, through so doing, to bring about their recovery. The ESA does not exclude from consideration for listing those species found on private lands; it does not generally make immune from the

ESA's prohibitions certain specified acts that may be harmful to listed species on private lands ("take" of listed species); and it does not bar the recognition of private land's sometimes vital role In species recovery. The recovery of over 45 percent of currently listed species, including the bald eagle, depends in some measure on the

conservation of habitats on private lands.

The drafters of the ESA appreciated that environmental and biological problems often do not respond to solutions that are bounded by human property lines, and consideration for political and other ownership boundaries are often biologically meaningless. But while an endangered bird may not alter the direction of its flight at a fence line separating public from private lands, the degree of "legal" control does change.

Considering the Private Landowner-What is Being Done to Facilitate Compliance

• The most obvious approach is to use, wherever possible, public lands for the preservation of habitat necessary to protect and recover an endangered species. Sometimes public land is capable of carrying much of the load for recovery of a species. For example, the recovery strategies for the Northern spotted owl and other associated old-growth dependent species in the Pacific Northwest are focused heavily on public lands. in some areas, where it is not possible to construct a habitat plan exclusively on public lands, it is still possible to use a core of public land for reserves and to impose lesser restrictions on private lands. This approach will be used wherever feasible.

• In recognition of the importance of non-Federal lands in conservation matters, the Service has been restoring wetlands and other Federal trust species habitats on private lands under voluntary cooperative agreements with landowners since 1987. This habitat restoration work is one component of the Service's "Partners for Wildlife" initiative. While not limited to endangered and threatened species, these programs provide a means whereby the Service can participate in funding landowners who undertake recovery actions on their lands through cost sharing arrangements.

In Fiscal Year 1993, the Service actively restored over 44,000 acres of wetlands and other Federal trust species habitats and over 90 miles of riparian and in-stream aquatic habitat on private lands under various agreements. Since 1987, the initiative has facilitated the protection or restoration of approximately 441,000 acres and

approximately 275 miles of riparian and in-stream habitat.

For example, Partners for Wildlife is working with private landowners to create wetlands throughout the San Luis Valley of south-central Colorado. Endangered species, including whooping cranes, bald eagles, and peregrine falcons use the wintering wetlands provided by Partners for Wildlife projects as places to rest and forage.

The recent report by Ducks Unlimited indicates that these initiatives are also benefiting non-endangered species. Many species of ducks are showing a double digit rate of population increase due to better water conditions and improvements

due to these and other restoration programs.

• In 1982, Congress passed the section 10(a)(1) amendments to the ESA on Habitat Conservation Planning (HCPs) to provide a means for non-Federal projects that result in "take" of endangered species to be permitted subject to carefully prescribed conditions. Section 10 provides a means to balance, or integrate, orderly economic development with endangered species conservation, and for the public and private sectors to develop "creative partnerships" to accomplish these goals. Consequently, the section 10 HCP process is more than just a permit process. it is a broad-based planning mechanism that, at its best, brings together Federal, State, and local government agencies and private interests to address and resolve endangered species issues within a regional scope.

Section 10(a)(1)(B) allows for issuance of HCP incidental take permits to cover unintended "take" resulting from otherwise lawful private actions, provided the applicant develops and implements a long-term HCP that adequately minimizes and

mitigates the taking.

Since 1982, when the section 10(a)(1)(B) provisions were passed the Service has issued 33 HCP incidental take permits and 12 permit amendments. At this time,

over 100 HCPs are in various stages of development, representing a significant increase in the overall volume of this program.

Examples of successful HCP's include the following:

The San Bruno HCP. Congress modeled the 1982 section 10 amendments after the habitat conservation plan developed by private landowners and local governments to protect the habitat of federally listed species on San Bruno Mountain in San Mateo County, California. As discussed in the legislative history of the 1982 amendments Congress expected the adequacy of future HCPs to be "measured against" the San Bruno Mountain experience. Congress also recognized that the HCP process would evolve beyond this first experience. This HCP is still in effect today.

Desert tortoise habitat in and around Las Vegas, Nevada. The interim HCP worked out with local governments in that area provides that developers of a residential subdivision pay a mitigation fee which, in turn, goes into a fund used to acquire conservation lands and pay for conservation measures on lands being managed as tortoise reserves, thereby allowing development to go forward while ensuring tortoise habitat farther away from the city, in concept, this mitigation fee is no different from a lot assessment to finance water, sewerage, playgrounds or other infrastructure; in each case, lot developers are paying to create common benefits for the community.

The Envirocycle, Inc. HCP involved the development of a 20-acre tract of land in habitat occupied by the San Joaquin kit fox and blunt-nosed leopard lizard. Through creative negotiations involving development needs and species conservation requirements. the Service and the landowner reached an agreement that protected 95 percent of the high-quality saltbush scrub habitat up front, allowed the project to go forward while maintaining the biological integrity of the conservation area and helped establish a precedent for use of "compensation credits" as a habitat mitigation device.

Approved in October, 1993, the international Paper HCP encompasses approximately 30,000 acres of private timber land in the Red Hills Province of southern Alabama. The primary affected species is the listed Red Hills salamander. whose entire geographic range is confined to the Red Hills area. Under the HCP, international Paper agreed to protect approximately 4,500 acres of optimum Red Hills salamander habitat, allowing only selective timber cutting within the buffer zones. Activities on the balance of the company's lands are unaffected by the HCP.

The philosophy underlying the concept of the HCP is to use the Endangered Species Act in order to trigger a pro-active planning process designed to configure long-range habitat protection. ideally this process involves State and local governments. private landowners, and environmental interests, as well as Federal regulators and scientists. Experience shows that the goal of the habitat-protection planning process should be protection of multiple species. That is it should contemplate habitat protection not just for listed species but also candidate and potential candidate species. Once such a plan is adopted. local governments and private landowner can be assured a degree of certainty about development opportunities over a defined future period of time.

In a number of areas where contentious endangered species conflicts exist, this Administration has embraced the HCP philosophy and has encouraged initiation of HCPs or similar processes to achieve the same objectives. Examples include:

• Through use of a special rule under section 4(d) of the Act, the Service authorized incidental take during the development of HCPs to protect to California gnatcatcher and other species dependent upon California coastal sage scrub to State, county. and local planners under the State of California's Natural Communities Conservation Planning (NCCP) program.

• In the Pacific Northwest, following finalization of the President's Forest Plan, the Service has issued an advanced notice of proposed rulemaking under section 4(d) to develop an approach to protecting northern spotted owls on private timberland that will secure dispersal habitat while allowing logging to go forward, and will encourage multi-species HCPs that protect fish spawning streams and other habitat as well as just only

streams and other habitat as well as just owls.

In some cases where we cannot work out a reasonable habitat conservation plan with planning and management techniques. it may be appropriate to consider land exchanges or even outright purchase based upon the importance and quality of the listed species habitat. Land exchanges have not been adequately used in the past. The Department of the interior and other Federal agencies own a large portion of lands in the West that is potentially available for exchanges. Such exchanges have been used in the past to acquire in-holdings in national parks and wildlife refuges, and Secretary Babbitt believes they can, and should, be used to acquire habitat for endangered species under appropriate circumstances.

The Service is completing a new policy handbook for the section 10 program that is expected to introduce significant administrative improvements to streamline the HCP process and make it more "user friendly" for landowners, especially small landowners. The following, which will serve to make HCPs more efficient while main-

taining protection for listed species, are being considered for inclusion:

• HCP categories (small-, medium-, and large-scale) would be based on the scope and impact of the project and would tie document and processing requirements to those categories. Private landowners proposing small-scale projects would be able to greatly trim the paperwork required for larger projects. in addition, many small-scale projects would be given expedited review under the National Environmental Policy Act (NEPA) requirements;

• Numerous mechanisms to streamline the permit process would be adapted to each HCP category, allowing small-scale projects to be processed more rapidly (e.g., waiving Solicitor review, basing implementing Agreements for such projects on a "template" and, where possible, standardizing other procedures for such projects to reduce document preparation and processing time); and

• Clear, nationwide standards for various aspects of the program (e.g., NEPA

and permit processing requirements) would be instituted.

Recovery teams have, in the past, been largely limited to Federal, State, and other sources of biological and administrative expertise. Recognizing that private individuals and commercial interests are, perhaps, the most essential ingredient for recovering a species on private property, those groups will be identified and brought into the recovery planning process where appropriate. This shared Service and National Marine Fisheries Service policy (published in the July 1, 1994 Federal Register) is intended to minimize social and economic impacts while bringing about the timely recovery of species. it provides for a "Participation Plan" process, which involves all appropriate agencies and affected interests in a mutually-developed strategy to im-

plement one or more recovery actions.

Section 9 of the ESA prohibits certain activities that adversely affect listed species. These prohibitions apply to all individuals, organizations, and agencies subject to U.S. jurisdiction. At the time a new species is listed, confusion about how that listing may affect the use of private property that provides habitat for those species can be very frustrating for the property owner. in response, the Service and the National Marine Fisheries Service announced another new policy in the July 1, 1994 Federal Register to identify, to the extent known at the time a species is listed, specific activities that will and will not be considered likely to result in violation of section 9. While not permitting the landowner to undertake illegal actions, the policy does serve to clarify legal issues, aiding the private individual or group in planning the use of their property.

To protect the habitat of the red-cockaded woodpecker in Georgia and Florida, the Georgia Pacific Company worked out a timber management plan under which logging crews are trained to spot woodpecker trees and avoid cutting in small buffer zones around them. This results in loss of less than one per cent of the timberlands

to logging.

The Service joined six other Federal agencies in signing the Federal Native Plant Conservation Memorandum of Understanding (MOU) establishing a Federal Native Plant Conservation Committee to coordinate ranking and implementation of conservation actions, database/information exchange, education/public outreach, and research on native plants and plant habitats of the United States.

Plants now constitute over half of both listed and candidate species. The Service's commitment to the MOU reflects the Secretary's emphasis on an ecosystem ap-

proach to conservation, partnerships, information exchange, and conservation of species at risk. For example, this month, the Secretary signed an agreement with International Paper Corporation to initiate a survey for candidate species of pitcher plants on timber lands in Alabama.

The work may lead to conservation actions that may reduce ongoing threats and

even potentially avoid the need for listing these rare plants.

# Continuing Issues

As international Paper's participation in this project shows, early coordination and participation in conservation actions for candidate species are beneficial to both the species and the flexibility desired by private landowners. The more successful early planning is, the more options private landowners will have in making land-scape and land management decisions in a way that minimizes restrictions on land uses.

We are evaluating a number of other ways to minimize land use restrictions and provide a degree of certainty to landowners that their section 10 permits will be final and that the Service will not revise mitigation requirements after the development of conservation efforts.

in closing, Secretary Babbitt's objectives under the ESA are clear:

- The Department, wherever possible, will seek to place the burden of habitat conservation on public lands; to use mitigation techniques; to work with local planning and zoning bodies to create multi-species habitat protection plans that provide both conservation values and a greater degree of certainty for landowners; and, in appropriate cases, to consider exchange or purchase with willing sellers.
- We recognize that in some cases there have been lengthy delays in the renegotiation and approval of habitat conservation plans. in the Secretary's October speech, he pledged that the Service would review this issue and seek to improve methods to provide more flexibility in responding to the needs of individual small landowners in the use and development of their property. Guidelines for the Service to follow in the preparation of HCPs under review at this time fulfill the Secretary's vision.

We are on our way to accomplishing these directives as evidenced in the aforementioned policies that were published in the July 1, 1994 Federal Register (i.e., the opening of recovery teams to private interests and clarifying section 9 legal issues for the private landowner affected by species listings).

Again, thank you for your time and consideration. if there are any questions, I

will be happy to address them.

#### STATEMENT OF MARY A. DAVIDSON

I am here to speak for those millions of Americans who would like to see a fair and balanced ESA. I appreciate the opportunity to share my experiences under the ESA. They have not been pleasant. My hope is that this will be helpful to those involved in making much needed and necessary changes to the ESA In 1984 my husband and I purchased 1.45 acres to build our homestead. We worked hard for the next 9 years to make enough money 80 that we could build our home. By the summer of 1993 we had managed to save enough to finally begin the process of planning and construction.

As some of you may know, the area around Austin, Texas is home to a number of species listed under the ESA. One of those species is the golden-cheeked warbler. On the advice of our architect, we sought from the FWS a document, known as a "bird letter," without which we could not likely obtain a loan. Essentially, the bird letter acknowledges that a property owner's land has been unoccupied (by warblers) for at least 3 years, or that there is no suitable habitat on the land. Land appraisers will tell you that without a "bird letter," the value of your property is seriously diminished—from 25 percent to 75 percent devaluation. This devaluation shows that, at least in central Texas, endangered species do not add to the value of one's land, but rather greatly subtract from it.

FWS told us that requests for "bird letters" generally take about 6 weeks to process. Ours took 16. The FWS refused to give us a bird letter, despite the fact that they have never surveyed our property, or that of our neighbors. They said that our property was in a suitable habitat area, thus, the FWS said, we would need a section 10(a) permit before we could build our home.

We asked what a 10(a) permit was, and what it would require us to do. The FWS told us that we would need to "mitigate" by setting aside land for habitat. I told them that we only had 1.45 acres, and that we didn't have any land to set aside. Their response was that we could purchase other land elsewhere that was good mitigation habitat. We were astonished—this felt like extortion—buying land for the government in exchange for the right to use our own land

it wasn't long before we became familiar with the jargon and the law that had taken our property and effectively put it into escrow. We learned that a 10(a) permit was required when a "taking" of a listed species would result from a project. Yet, after spending several thousand dollars, we also discovered that building our home on our property would not "take" an endangered species.

After hiring two different biologists, it became dear that our land was not good habitat for golden-cheeked warblers. The nearest documented sighting of a warbler was about a quarter-mile away from our land. After hearing that a number of recent Federal court decisions have ruled that "taking" a species means to physically injure a species, we had trouble understanding why we were being prevented from building our home. FWS told us it was irrelevant whether the endangered species were actually on our property. Their concern was for the birds that were supposedly near by.

Here it was the middle of December. I had no idea what to do. I put our building project on hold. I was shocked that this could be happening to us. I couldn't imagine being asked to go to this expense in order to use our land. I would never be able to sell this piece of property, or use it for anything as it was too small for any use except for a residence. I felt betrayed that this was all brought about by a government regulation. it was at this point we finally realized that we were being denied the use of our land by FWS and there was nothing we could do!

The abuse of the ESA by the FWS results in citizens being damaged with no practical redress—I assume the vast majority of Americans that fall into this same situation are like us—without the financial resources to bring a law suit. We are living proof that the current interpretation of the ESA does deprive citizens of their constitutional property rights, and unless you have a rich uncle you can not do any thing about it!

Through the Texan Wildlife Association I was directed to Texas State Representative District 47, Susan Combs. In January I asked Ms. Combs to assist us with our dealings with FWS. She did make an appeal and at first it looked as though we would get a favorable response. Then when we had not heard for several weeks from FWS, Ms. Combs office contacted FWS and was told that the staff maintained we must still comply with the requirements of the 10(a) permit. Ms. Combs recommended I call FWS for an explanation and also write to my U.S. Congressman J.J. Pickle and Senators Kay Bailey Hutchison and Phil Gramm. I did write to these people as well as several others.

I called FWS for an explanation as was suggested and Joe Johnston of FWS told us that our land was "in an existing bird habitat (2/7/94)"—which contradicted the opinions of the two biologists we hire& After paying for two biological surveys, it became clear that our little plot of land was devoid of warblers, and would be poor habitat for them if they ever exceeded the carrying capacity of that which they currently utilized. We did not have the money to buy additional land. I asked Mr. Johnston why we had to, and his response was that building our home constituted "urbanization." Even though . . . homes/families . . . children lived in the neighborhood, the government said that the commotion of our three children and pets would somehow "disrupt" the habitat of the warblers that were once "sighted" a quarter-mile away. He also told me the ESA did not allow for any exceptions for size of property or nature of land use such as building our homestead.

I expressed that I thought the cost of complying with the requirements of a 10(a) permit might be astronomical. Johnston agreed and said that "the procedure out-

lined by congress in the 10(a) permit are not procedures the small landowner can go through."

This conversation left me with the definite impression that the FWS was just as interested in preventing growth (urbanization) as in saving endangered species. They notify me in writing I must obtain a 10(a) permit, but then in conversation

they admit there is no way I can comply!

My neighbors were all very concerned. They did not understand how a new subdivision of 13 houses less then a mile away was being built yet our one home was not allowed. They realized this affected their property value and their ability to utilize their property. On February 22, 1994, I wrote a letter to John Rogers, Regional Director of FWS. The Austin FWS office responded with a letter dated March 25, 1994 letting me know that they had decided that we would not be required to obtain authorization under the Act provided no warblers are found on our property; if we agree to follow certain conditions.

This entire experience with the ESA has caused us great hardship. I spent many hours each day, I can't even begin to figure total number of hours, trying to resolve this situation. We have three children. My responsibilities include parenting, teaching, and assisting in my husband's home based business. I was left with considerable fewer hours to perform these tasks because of the enormous amount of time

that was required to pursue our goal to overcome this obstacle.

We have spent several thousand dollars to pay consultants to assist us. We put our building project on hold after we learned we would not have immediate use of our land To start, stop then restart a project is costly. We lost our opportunity to take advantage of low interest rates, in fact assuming we will have to obtain an \$200,000 loan, the 30 year amortized increased cost for us to build has increased over \$70,000. This could be of such a significant difference that we may now not qualify for the projected mortgage payments.

There is even some question as to whether we will be able to use our land as security for our loan because of this. The bank requirement that we have a "bird letter" is one of the main reasons we have worked so hard to resolve this issue. Without financing we will not be able to build so we could not proceed without a "bird letter".

One of the worst aspects of this entire ordeal is the horrible no man's land in which we find ourselves. The delays and uncertainty have been extremely costly, not only financially but in stress to our family. It has cost us money we should not have spent, but more importantly it has cost us uncertainty as to whether or not we can

actually build our home.

I found FWS in Austin to be insensitive. They have never had me in for a Ace to face meeting. The one time I was in the FWS office I found the receptionist rude and uncooperative. In my phone conversations I found the staff defensive. There was no effort made to try to work something out for us. I was told they would be working on something for people with small tracts of land that might be available in the future, but at the time of our conversation there was nothing that could help us. There still isn't anything available for the small landowner. When the salaries of these people are coming out of our hard earned tax dollars it is appalling to find this level of disregard toward tax payers.

I made an effort this spring to learn what the City of Austin was planning with regard to the Balcones Canyonland Conservation Plan (BCCP), a regional habitat conservation plan. FWS indicated this was a mechanism that would be available to small landowners if it were to pass. I called the assistant city manager about the draft of the habitat conservation plan. I wanted to express my concerns about the excessive cost to the small landowner. I figured from their numbers the mitigation would be somewhere between 300–600 percent of the value of my land. There is a great deal of uncertainty with the amounts because there are two factors that are figured based on each case. One factor is the mitigation ratio which would still be figured by FWS the other being the actual cost per acre. The land would be bought at market value so depending on what price had been paid for that particular piece this would determine what the cost to me would be. The assistant city manager's response to me with regard to cost was that was just the price I would have to pay to live out there!

When I requested that the city council consider exempting small landowners at a public hearing regarding the BCCP the mayor responded by saying that the BCCP was totally voluntary so I should deal directly with FWS if it didn't work for me. There is voluntary then there is "voluntary". FWS on the other hand says the habitat conservation plan is just what small landowners should use!

I have some great concerns over what I have experienced as well as what effect the ESA has in a much broader context. First, it is a very negative Act. Some have said it is flexible but I have seen no examples of this. It brings about an adversarial situation between the landowner, FWS and the species in question. If I have good habitat or create good habitat then I will be penalized if endangered species are found. The ESA puts the rights of the threatened species above those of the landowner. The current application of the ESA results in the egregious implication that the landowner has caused the plight of the species in question. When in fact most of the time it is because of the good stewardship of the landowner that wildlife actually thrives. The landowner is financially responsible to bear the cost to preserve the endangered species.

I see groups and individuals using citizen lawsuits to bully Federal Agencies in an effort to manipulate compliance with their "Ecosystem Management" agenda, which includes radical concepts such as the biocentristic view of humans as just another "biological resource".

There is a great deal of uncertainty with regard to how the ESA might affect an individual. One cannot make firm plans if some time down the road the rules change and you can no longer continue your project. For example Mr. Howard L. Burris Jr. inherited property that has been in the family since 1946. In 1976 Mr. Burris finds it necessary to offset burdensome property taxes. He inquires of several conservation groups to see if they are interested in buying his land. He is told by the Audubon Society that they would accept it as a gift but they say that at the time this land has little value as wildlife habitat as there are millions of acres of identical ecosystem beyond the city limits. They indicate that the Audubon Society would be better served if they could have the land to sell and use the proceeds to purchase habitat elsewhere. How ironic! Mr. Burris now considers developing the land into home sites. Austin's City Planners agree with the subdivision proposal. In 1978 Mr. Burris makes the financial commitment to begin this project. The project was moving along successfully until more then 10 years later when Mr. Burris is confronted with a Federal injunction from proceeding with any further activity because of the threat to endangered species. Trying to resolve this problem Mr. Burris eventually lost most of his remaining land to foreclosure. Now conservation groups contact Mr. Burris to see if they can acquire the remainder of the tract at ranch land price. They cannot afford to compensate Mr. Burris for the value of the improvements he has made over the preceding 14 years. How can any one make plans or consider investments with this type of uncertainty.

Another example is Mr. David Trotter. He is in a partnership that invested in 1,100 acres. Their intent was to develop 800 acres and leave the rest undisturbed. There was a window in the contract to allow necessary time to investigate the particulars of this property. FWS had already begun their work on preparing a response under section 7. Mr. Trotter was reassured that he would have their determination within that window. F.D.I.C., the seller, had already spent \$250,000 dollars to comply with the necessary studies and requirements for the section 7. FWS did not have the determination completed within the window and the sale went to closing. Then Mr. hotter receives the response from FWS it is as follows. 1) 650 acres to be established and maintained as a preserve for the golden cheek warbler. Financed for an indefinite period of time by the owner. 2) 78 acres to be established and maintained as a preserve for cave invertebrates. Financed for an indefinite period of time by the owner. 3) 850 additional acres of land to be bought as mitigation which will also be required to be established and maintained as a preserve. Financed for an indefinite period of time by the owner. Mr. Trotter in exchange for this may develop 250 of the 1,100 acres. I guess Mr. Trotter may have wished he had invested in one of these organizations that he will now have to pay to maintain the land that will be set aside as a preserve.

Yet another example, Marj and Roger Krueger bought a lot in an improved subdivision in 1989. They had a custom home designed and were in the final stages to begin building. They learned when they went to obtain a building permit from the city of Austin that they would be required to get a "bird letter" for this permit to be issued. Although this subdivision is fully developed, road utilities and yes other residences, the Kruegers were told they would be required to obtain a 10(a) permit in order to build Their lot backs up to an undeveloped area and there is bird habitat in this area. Biological surveys have been done to show no evidence of birds on their property. it would only be necessary to remove one tree to build this home. They could not afford the astronomical cost to obtain and comply with a 10(a), so they have lost everything. Unfortunately there are many others who have been harmed, I have included a list with this statement. These examples as well as those listed in the attached list show there are indeed many people who have been negatively affected by the ESA.

Some have suggested that financial compensation to the landowners who are substantially deprived of the economically viable use of property as a result of action under the ESA would impair the protection of wildlife because it would make implementing the ESA too costly. I think we need to realize that implementing the ESA as it is being applied currently is far to costly to the landowner. We are back to the question of balance. If it is recognized that a landowner has indeed been deprived of the economic viability through the ESA why should the landowner have to bear this burden? We as landowners will be excellent stewards if allowed to do so and most of the time it would cost nothing from the government. I believe the reason more people have not filed a "takings" suit is because for most this is cost prohibitive, it is simply out of reach for the average citizen.

The ESA is being applied so stringently that it appears the government controls the land, therefore I no longer own it but the government owns it. Let us look at the condition of the countries in this world that have tried central planning by the government. We see a ravaged and abused environment, a suffering economy and people who must live at a much lower standard of living then most in the United States. We should not be so naive to think we can do it better therefore the end result will not be the same. I believe the landowner who has a vested interest in the land he owns will want to maintain and improve the property so as to maintain its value. This motivation in most cases will result in the landowner being the most reliable steward.

Land owners should have a significant role in all plans by our government that affect the use of their private property. Let history remind us how this country got started. A land with great freedom, let us pass that freedom on to the future generations. To make me pay a fee or provide land for mitigation is nothing more then asking me to pay a tax in order to use land I purchased legally.

These disincentives must be removed. By punishing property owners for having endangered species the ESA discourages people from being conservationists. Reports of people "doing away with" endangered species habitat on their land is not uncommon. Others simply make sure endangered species can find no refuge on their land by removing any potential habitat for the species. What I see happening is that the ESA is creating enemies of wildlife rather than to encourage conservation. The risk of having one's real property assets turned into liabilities overnight is enough to make some people act perversely. For many small property owners, the choice between having endangered species on your land and having a home to live in, or the revenue to live on, is an easy one. This, in my view, does not have to be. I am convinced that most people like wildlife, and they would go out of their way to attract wildlife to their land, if they weren't likely to lose the use of their land if they did this. I think the history of conservation in America shows this to be true.

Once the disincentives are removed then we will not have to be concerned that our property values will plummet if a listed species is found on our land. Voluntary cooperation, initiatives, and management are the very methods used to restore the wood duck nation-wide and the eastern turkey throughout the south.

Wood ducks, for example, were thought to be on the brink of extinction during the first quarter of this century. When people learned of this, they came to the wood duck's defense. Thousands of people put up nesting boxes for the wood duck on their own land, hoping to provide a home for a homeless and beautiful species of waterfowl. As a result of these cooperative community efforts, today wood ducks are abundant. FWS now issues guidelines to State fish and game departments to allow hundreds of thousands of wood ducks to be hunted without harm to the species.

Imagine if the ESA had been in force during the time wood ducks were imperiled. How many property owners would have gone out of their way to attract an endangered species to their property? If the wood duck had been listed under the ESA, I doubt very many would have risked losing their property by putting up the nesting boxes. In fact, my guess is that people would have viewed wood ducks much like they view spotted owls and red-cockaded woodpeckers. Even though both of these listed species have proven themselves capable of utilizing artificial nesting boxes, and even fledging young in them, I have not heard of people putting them up so as to attract the birds.

Some other successful recoveries are White-tailed dear, Rio Grande Turkey, prong-horn antelope, white-wing dove.

Texas has success stories where landowner and State fish and wildlife agencies have worked together amicably to enhance habitat for wildlife and recovered threatened species. I am confident that other states have also experienced some success as well. Let's look to these States to learn how they were able to get these results and use these examples in making changes to the ESA.

For small property owners like myself and my husband, insult is added to injury. We do not even have golden-cheeked warblers on our property. The nearest documented sighting of warblers if a full quarter-mile away from our little plot. No one gave us any hints on how to make our land conducive to golden-cheeked warblers. They simply told us that, even though there aren't any on our property, our property rights are subordinate to those of the golden-cheeked warblers.

it is my view that the ESA is creating enemies of wildlife, rather that the defenders it should be fostering. I resent not being allowed the opportunity to use my own land. it has cost my family dearly. But I also resent the government's arrogance. In my experience, FWS is more interested in working against landowners than with them. In Austin, their view seems to be that the ESA gives them the right to deprive property owners of their own land, even if that land is devoid of listed species.

My understanding of the law is that the government cannot declare that private property is off limits to the property owner simply because the owner has land that could potentially be used by wildlife.

if the people of the United States want to protect the environment through something such as the ESA then we all should have to share the financial burden. We can't just say well the government doesn't have the funds to do this ethically so we'll just give the bill to someone else.

A question I have as an individual that once was told by the government that I must file for a 10(a), is exactly how many individual landowners have been issued this permit in the entire 21-year history of the ESA?

There are only two of us here to represent all of those who have been adversely affected. I know of many more people who would also like to have an opportunity to tell you their experience with the ESA. What mechanism is available for these people to do this?

[Note: Attachments to this statement have been retained in committee files.]

Mary A. Davidson 7106 Guadalupe St. Austin, TX 78752-3006

The Honorable Bob Graham, Chairman Environment and Public Works Committee Clean Water, Fisheries and Wildlife Subcommittee SD-456 Dirksen Senate Office Building Washington, D.C. 20510

July 27, 1994

# Dear Mr. Chairman:

Thank you for inviting me to testify before the Subcommittee on Clean Water, Fisheries and Wildlife. I appreciate your genuine interest in those of us who have experienced conflict with the current application of the ESA.

During the hearing I gathered that U.S. FWS does not acknowledge that these conflicts exist. This greatly concerns me. Their response that HCPs are the solution to problems such as mine is very misleading. Currently there is no such plan in place in Travis County Texas that small land owners can use. The plans that have been presented in the past to land owners in Travis County favored the developer and the cost to the small land owner would be excessive.

I appreciate that Mr. Spears acknowledges that there is a need to streamline the 10(a) permitting process for small land owners. Because in general I have experienced a level of reluctance by U.S. FWS to support any changes to the ESA. They seem much more inclined to insist that the existing ESA works.

The U.S. FWS has been trying to create an HCP, for Travis County Texas since 1988. I cannot be reassured that this is a solution when after all this time there is still no plan in place. I challenge your committee to contact some of those people in Austin to which U.S. FWS say they have issued 10(a) permits. Ask these folks if they agree that they had a positive experience attempting to obtain a 10(a)permit. This will be a true indication as to whether the process they had to endure is an incentive or disincentive. I would also like to know if these are individuals or business that were issued these permits.

We need to stay focused on the need for balance when considering necessary changes to the ESA. If we really want to save the endangered species we should seek the highest level of cooperation from the land owners. If the disincentives could be removed then people would not feel the use of their

land was threatened. This can only be accomplished by making some much needed changes to the ESA to remove the disincentives.

The land owners did not cause the existing problem. Most land owners would be more then happy to cooperate in the recovery of endangered species if a more acceptable process were available. Throughout American history the land owner has cared for wildlife. The historic record shows that private conservation efforts have been very successful in restoring declining wildlife populations.

I personally would like to be able to take positive action on my own property to accommodate the species of concern. I expressed that desire at the hearing. I recall the response from Mr. Spears was that I indeed would be able to, provided I obtain a 10(a) permit. The current ESA requires me to have a 10(a) permit if a bird is found nearby or even lands in a tree momentarily on my property. The implication from Mr. Spears (and correctly so) is that the 10(a) permit will allow someone to harm or destroy one of the species. This is certainly not what I was suggesting I wanted to do. In fact there is evidence that I could do much to improve my property that would indeed change it from poor habitat to very good habitat, as well as allow me to build my home there.

I can't afford to take positive action with regard to improving the habitat on my property with the current ESA in place for fear I will have further restrictions placed on the use of my land, as well as my neighbors land, should one of these birds decide to now utilize my property. This is a classic example of how the current ESA has destroyed the incentives that help the land owner take positive action to assist in the recovery process.

I am encouraged that you are discovering the many people who have felt the adverse affects of the current ESA. Many, including U.S. FWS would like to downplay these problems. For those of us who have been caught in the middle of this controversy, it is very real.

I am offended that some would attempt to discredit my testimony so that they can claim no one is harmed. The briefing document dated July 15, 1994 was presented to the committee at a meeting prior to the hearing. In the section Anticipated Testimony p. 13 & 14, the information relating to my testimony implied that the letter sent to me by U.S. FWS in March 1994 was the only response I had received from the service. This is not true, in fact much had transpired between the time we made our initial request in August 1993 and March 1994.

I assume they were interested in "fixing" the record because some of the communications I received prior to March show that U.S.FWS had a problem

with making consistent statements to me. I have provided the entire account in my written and oral statement to the committee. My testimony is well documented and therefore can be substantiated.

When I was invited by this committee to come testify, I did not realize by accepting this invitation I would be publicly libeled. This is outrageous, I spent a considerable amount of time and effort in preparation to testify at this hearing. I am sure you realize it would have been much easier for me to stay at home and attend to my responsibilities, but the committee impressed upon me the need to show by my testimony where changes are needed with the current ESA. Your interest in making the much needed changes to the ESA was the reason I made the effort to bring my personal experience to this hearing.

I understand it is the responsibility of this committee to bring about the much needed changes to the ESA so that all of us can work in a positive way toward preserving and saving endangered species. The only way we will have an ESA that works is to remove the disincentives. Please listen to what people are telling you about how the ESA has negatively effected them. I am not alone, there are many others who have been adversely affected and their problems should be heard as well.

Sincerely,

Mary A. Davidson

cc: G. Mitchell; F. Lautenberg; H. Reid; J. Lieberman; H. Wofford; J. Chafee; D. Durenberger; L. Faircloth; D. Kempthorne; J. Peterson; B. Irvin; B. Leary

# STATEMENT OF MICHAEL A. O'CONNELL, DIRECTOR, OF HABITAT CONSERVATION PLANNING, THE NATURE CONSERVANCY

#### I. INTRODUCTION

Mr. Chairman and members of the Committee, good morning. My name is Michael O'Connell, Director of Habitat Conservation Planning for the Florida Region of The Nature Conservancy. Thank you for the opportunity to discuss the Brevard County, Florida Habitat Conservation Plan (HCP) and offer some thoughts and recommendations on section 10(a) of the Endangered Species Act (ESA).

The Nature Conservancy has been involved in HCPs since section 10 was authorized in 1982. We have played a major role in three regional planning processes: Coachella Valley, California; Balcones Canyonlands, Texas; and Clark County, Nevada. We have also worked closely with the California Natural Communities Conservation Plan for the coastal sage scrub, a process that goes beyond species-focused

planning to include an entire imperiled natural community.

My own experience with Habitat Conservation Planning began with extensive field studies and data collection in preparation of a 1991 book called Reconciling Conflicts under the Endangered Species Act: The Habitat Conservation Planning Experience, that I coauthored with Michael J. Bean of the Environmental Defense Fund. We examined several plans in great detail and surveyed many others. Since 1992, I have been the facilitator of the Brevard County, Florida, process to create a regional habitat conservation plan for the Florida scrub jay and 18 other listed and candidate species that share its habitat. My views, therefore, are based on both a broad perspective on HCPs as a policy mechanism, and intimate experience with the process of creating a regional conservation plan.

Balancing the public's desire for viable conservation of rare species and natural communities with individual aspirations for utilization of private property is a complicated, sometimes controversial process. Over the past decade, HCPs under section 10(a) of the ESA have emerged as a way to resolve some of these conflicts, especially in rapidly urbanizing regions. HCPs provide opportunities to build relationships that achieve public benefit while accommodating private sector needs. They can leverage limited resources into conservation action and make the ESA more proactive. HCPs are one of the existing ESA provisions that encourage ecosystem level conservation. Furthermore, regional HCPs can complement the recovery planning obli-

gations of the Fish and Wildlife Service.

The Nature Conservancy's practical, field-level work throughout the country has convinced us that section 10(a) is basically sound, but that improvements in the way HCPs are conducted will make a tremendous difference in their success. For example, many HCP processes would profit from better application of classic conflict resolution techniques and carefully structured negotiations. Targeted research and proper utilization of biological data would greatly increase the certainty offered by HCPs. In addition, many of the problems practitioners encounter in the process of developing an HCP might be minimized by a more strategic approach to HCPs by the Fish and Wildlife Service. For these and other reasons, we are convinced that the ESA currently contains most of the necessary provisions to allow HCPs to work well. With some policy and implementation improvements, HCPs could more readily fulfill their promise of reconciling species protection with economic progress.

To illustrate these points, I would first like to describe our experiences with the Habitat Conservation Plan process for the Florida scrub in Brevard County, and then offer some thoughts on ways the section 10(a) permit process might be im-

proved to take full advantage of HCPs.

#### II. THE BREVARD COUNTY SCRUB CONSERVATION AND DEVELOPMENT PLAN

Since the authorization of section 10(a) in 1982, the U.S. Fish and Wildlife Service has issued 28 HCP permits and amendments, mostly for small plans. There are currently more than 80 plans being developed. The vast majority of these are in California and the West. Few HCPs were undertaken in other regions in the past, although interest in the process has grown over the last several years. Only one large HCP has been attempted in Florida prior to the Brevard Plan, for several protected

species on North Key Largo in the mid-1980s. Although Monroe County never applied for a 10(a) permit, the planning process generated enough incentive for the State of Florida to purchase nearly all the imperiled habitat under its Conservation

And Recreation Lands program.

The lack of section 10(a) applications from Florida is not because of a lack of endangered species. Florida ranks third behind California and Hawaii in the number of listed and candidate species it harbors. With an annual population growth of more than 350,000, controversies over economic activity and protection of significant lands are a daily fact of life. Florida has been very aggressive in its dedication to protecting sensitive lands and has committed strongly to Preservation 2000, a land buying initiative that has generated \$1.5 billion over the past 5 years for land acquisition.

Yet when Brevard County ran head-on into a conflict between issuing building permits in scrub habitat and protection of the Florida scrub jay, it turned to a regional HCP as the way to reconcile the problem. The scrub jay was formally listed as threatened in 1987, and that carried with it prohibitions against local governments incidentally promoting take of the species by issuing clearing permits in occupied habitat. The State field office of the Fish and Wildlife Service made that obligation clear in 1991, when it notified Brevard County of its potential liability under the ESA.

Ironically, it is testimony to the potential of regional HCPs that Brevard County did not immediately seize upon the HCP mechanism as the solution to its problems, but reached that conclusion after nearly a year of research and examination of alternatives. The county commission first appointed a balanced citizen's group of all affected interests to explore ways of complying with the ESA. These alternatives included a short-term, small area HCP, a "compliance plan" of individual set-asides in occupied habitat, and challenging the authority of the Service to require compliance with the ESA in the first place. The citizen group unanimously recommended a regional HCP for not only the scrub jay, but all the other listed and candidate species that share its habitat. They made it clear that their choice was based on the long-term economic predictability and biological flexibility that such an approach offered. This goal of predictability has been the centerpiece of the process ever since. The county commission acted on the citizen request in December 1992, and unanimously authorized development of an HCP for the entire county.

Rather than describing in detail the entire Brevard process, I will present our experiences in terms of critical issues and how they have been addressed. These issues are: process structure; application of scientific data; and public involvement.

#### A. Process Structure

One of the fundamental issues in resolving any conflict is developing a negotiation process that all affected interests can commit to fully. Dedication to finding a solution and trust are critical to the process. Some previous HCPs have been stalled by perceptions of an unfair or biased process. Others have been troubled by a lack of application of proper conflict resolution techniques. Brevard County wanted to avoid these pitfalls. To ensure balance and buy-in, therefore, Brevard County authorized a steering committee of six broadly affected interest groups. These groups are:

Environmental Community Business/Development Community Landowners with Scrub Habitat General Property Owners Participating Local Cities County Government

Rather than appointing the representatives from these groups, the county asked the groups to choose their own delegates and provided forums for each interest to do so. The result is that the affected interests are represented by someone whom they trust. Each steering committee member acts not only as a representative of his or her own interest group, but also acts to bring the steering committee's discussions back to the interest group and to gain input on decisions. The primary task is to bring a single, representative voice to the table from a broad constituency. Among each interest group there are individuals who actively participate in the

process, and others who simply wish to be informed of progress and decisions. A multi-level negotiation process has emerged that maximizes information, input and buy-in.

Facilitation is a key point in any conflict resolution process and Brevard County recognized this immediately. The county asked The Nature Conservancy to facilitate the planning process, and the Conservancy has volunteered its efforts from the outset. The Conservancy is viewed by all participants as a neutral party, and we have made clear from the beginning that our only agenda is a successful resolution to the conflict. The Conservancy's local reputation for non-advocacy, solution-based operation is part of the reason for this acceptance.

Another important structure issue is that the citizen steering committee operates only on consensus. Consensus is fundamentally different from compromise, in that no interest need give up its fundamental concerns to reach a solution. The committee decided to operate this way so that representatives could set aside concerns that their needs would be outvoted and instead concentrate on solving common problems. While this point seems minor, the commitment to consensus has been tested several times and it has been fundamental to the success of the process so far. Some problems have been very difficult to solve, but the eventual answers have been wiser and longer lasting, and trust in the process has grown greatly.

#### B. The Scientific Process

The foundation for long-term success is the ability of an HCP to address biological crises facing the focal species. The Brevard steering committee believes that good science is in everyone's best interest. The county recognizes that the only way the conflict can be reconciled with any certainty is if the protection measures created under the plan are successful. If the biological elements are ill-conceived, compromised or undermined, ultimately everyone loses. The Brevard steering committee decided to take the time to allow necessary biological data to be gathered and analyzed, a process which took more than a year.

The Brevard County HCP is fortunate in that the primary species of concern for the HCP is one of the best-studied birds in North America. More than 25 years of data on life history and requirements of the scrub jay have been compiled and published. The scrub jay is also an excellent umbrella species for planning purposes, since protecting the jay viably also protects most of the species that share its habitat. Yet at the beginning of the process, data about the distribution of jays and their habitat in Brevard was incomplete. No data existed on the quality of remaining habitat or the types of land use in between the islands of habitat. These are the most important data for conservation planning and they took time to collect.

The committee worked with a scientific advisory group and hired a biological consultant to provide needed information. Data collection was completed in May of 1994, and the scientific advisory group is spending the next 3 months designing a set of alternative preserve networks for the remaining scrub habitat in the county. Some HCPs have addressed data collection and analysis adequately, and then disagreed over a single reserve design. Brevard has tried to avoid this problem by developing alternatives that will be biologically equivalent, but spatially distinct, so that the steering committee is not reduced to accepting or rejecting one single option.

A sound, scientific basis for an HCP is critical. Unfortunately, the biological part of the planning process is often treated as if it were an affected interest, with the danger of the viability of the plan being politically compromised away. The biological strategy for protection is the foundation of long-term predictability for an HCP, a fact recognized by the Brevard citizen committee. In Brevard, good science and reserve design is advocated by the interests.

# C. Public Involvement

The consensus goals of an HCP and a balanced planning process are difficult to oppose once the public is aware of them. Many of the problems and opposition faced by specific HCPs have stemmed from misunderstandings about their purpose and progress by key interests. Several HCPs have suffered from lack of involvement of

the broader public, which has led to decreased awareness of and support for the process.

Since the effort in Brevard has the goal of consensus among broad interest groups at a regional scale, involvement of the public is not only desired, it is *crucial*. The Brevard steering committee opens all meetings to the public, and under Florida's strict public meeting laws, not even two of the steering committee members can assemble without public notice. The committee encourages individual comment, and accepts written advice at any time and oral input monthly. The county also notices all meetings in the local newspaper, and meetings are held in public buildings.

The primary lesson learned in the Brevard process is that there is no such thing as too much public awareness. Most of the opposition to the plan arises from lack of knowledge about the process and its goals. There are always individuals on all sides that philosophically oppose any conservation or any development, and those persons are unlikely to be satisfied no matter how balanced and fair the process. Depending on their influence, they may be able to derail the HCP, and in fact have done so in a few plans. One of the Conservancy's jobs as facilitator in Brevard, therefore, is to communicate the specifics of the HCP process to persons with a range of interests to increase their understanding and trust.

Unfortunately, increasing public awareness is both a labor-intensive and expensive project. The Brevard HCP operates on a limited and uncertain budget, to date totally financed by Federal appropriations. The citizen committee nevertheless has developed a simple plan for increasing public knowledge and has implemented it over the past year. Since mid-1993, the committee has published a bi-monthly newsletter highlighting the progress of the planning process. They have created a slide show and video about the planning process and its goals. In addition, the committee developed a brochure describing the goals and benefits of the HCP and has disseminated it widely. Clearly, the committee could accomplish much more with greater human and financial resources.

Perhaps the most important project to increase public understanding of and support for the Brevard HCP is an economic analysis of the costs and benefits of the plan. The Balcones Canyonlands HCP, in particular, benefited from a study that demonstrated the economy of scale of the regional plan as opposed to the cost of individual section 10(a) permits. The Brevard citizen committee has hired a respected economic consultant to conduct a phased study that will first project the cost of the current regulatory scenario over thirty years to calculate the consequences of not doing the HCP. The second phase will compare the costs of the HCP strategy to this baseline and will likely reveal the benefits of our regional approach. The results will be presented broadly to the public and key groups.

# III. LESSONS LEARNED

The experience of the Brevard HCP, while not yet complete, and other regional HCP attempts, have shown us ways that HCPs can more fully realize their potential. In order to realize this potential, however, some policy and implementation improvements are needed.

A. Funding: Establish a Mechanism Providing a Readily Available Source of Funds for Regional Habitat Conservation Planning Processes

Brevard County has been fortunate that two consecutive \$100,000 congressional appropriations have been available to fund the planning process. Other HCPs have not been so lucky and have suffered from the absence of adequate funds to complete biological studies and prepare the plans and environmental documents. Even in Brevard, where the overall budget has been roughly adequate, cash flow has been a problem. Funding has arrived in a slow trickle, rather than in timely amounts when needed. As a result, the process has been slower than necessary.

These issues could be resolved by creating a funding mechanism that would allow developers of HCPs to budget the cost of their planning process and obtain a grant or no-interest loan. This would place necessary funds in the hands of the planners immediately and expedite the HCP process.

B. Candidate Species: Authorize Section 10(a) Permitting for Candidate Species, If Those Species Are Treated as If They Were Already Listed

The common goal of all HCP participants is certainty. Some regional plans have tried to increase this certainty by including species that are not currently listed but are candidates for protection. In Brevard County for example, only 2 of the 19 species are listed, but all are likely to receive protection in the future. Unfortunately, there is no existing mechanism to allow the Fish and Wildlife Service to grant a permit for candidate or unlisted species.

There is one crucial caution regarding unlisted species permitting. Many candidate species (in fact, all the species designated as Category 2 candidates) are not yet protected because not enough information is known about them to make a proper listing decision. Some are biologically deserving of protection, others may not be so. Since the information needed to make a satisfactory listing decision is far less than to properly plan for a species' long-term survival, it is unreasonable to expect that HCPs could adequately account for many unlisted species without additional research. Furthermore, by assuming that a species can tolerate broader losses of habitat because it is a candidate, there is a great risk of HCPs driving such species to extinction. If the Fish and Wildlife Service is unable to resolve the status of the candidates in an HCP area before the permit is issued, permits for candidate species should only be issued in cases where they are treated as if they were already listed.

C. Overlap with NEPA: Allow Regional HCPs to Comply with NEPA Requirements Through Environmental Assessments Rather Than Environmental Impact Statements

Successful HCPs must conduct a rigorous public involvement process. As the Brevard County effort shows, even without laws requiring public disclosure and input, consensus would be impossible without an honest, open negotiation. HCPs are often functionally equivalent to the provisions of the National Environmental Policy Act, but have no relief from the Act's documentation requirements. Some HCPs have found that after considerable public input and documentation, they still must complete exhaustive Environmental Impact Statements. Although some individuals have suggested exempting HCPs from NEPA, the documentation involved in an Environmental Assessment is minimal, and, by reference to the HCP document, would ensure that all the provisions of NEPA have been satisfied. HCPs should be allowed to take advantage of this opportunity.

D. Interim Take Provisions: The Rules Governing Interim Take on Private Lands Should Be Established Upon Listing a Species, or Before Initiating a Long-Term Regional HCP

Good regional HCPs take time to create. Interim take provisions can be important in managing the conflict and relieving some development pressure until a long-term solution can be crafted. In the past, HCP processes have tried to or been forced to substitute for the absence of such guidelines through interim measures such as short-term HCPs. It is clear from several experiences that these do not work well and undermine the long-term effort. The Brevard County citizen committee specifically rejected an interim HCP for that reason.

An HCP process is not the appropriate place to address interim take. Structuring the process well can help manage the interim, as it has done in Brevard County. But a sound process structure is insufficient in most cases. A potential solution lies in the Fish and Wildlife Service's rulemaking ability under section 4. The Fish and Wildlife Service could develop provisions for interim take at the time of listing a species for which an HCP is anticipated, or it could reference a satisfactory local or State process for regulating incidental take. For example, if Brevard County had chosen to establish a biologically valid process for issuing clearing permits in scrub habitat similar to the one developed for the California gnatcatcher, and the Fish and Wildlife Service had endorsed it, most of our interim concerns would have been satisfied.

It is incumbent upon the Fish and Wildlife Service to encourage such partnerships during the interim of an HCP process. To promote this solution, the Fish and Wildlife Service might even create several model ordinances from which local govern-

ments could select. Ultimately, however, it is not the responsibility of the Fish and Wildlife Service to develop ways to allow interim take. If a local government declines to establish such provisions, then the Fish and Wildlife Service is obligated to only allow interim take under section 10 permits.

E. Incentives: Incentives Should Be Developed to Encourage Participation in Regional HCPs by Private Landowners

HCPs are fundamentally a response to the disincentive provided by the taking prohibition contained in section 9 of the ESA. They work when the credible threat of enforcement obliges landowners to seek relief from regulation. Inconsistency in implementing regulations and problems with enforcement have confounded sincere attempts to create HCPs. In addition, these "sticks" are rarely enough to force a property owner into an HCP. Serious consideration should be given to including incentives for participation in HCPs on the part of private landowners. For many simply the opportunity to secure long-term predictability and have compliance costs subsidized is enough incentive. Brevard County is exploring some additional local incentives such as preferential tax assessments and temporary conservation easements to encourage landowners to participate in the plan. Perhaps the most effective general incentive for HCPs would be committing the necessary Federal resources to the mechanism to enable it to work well.

F. Small Landowners: Encourage Development of Regional HCPs to Assist Small Landowners in ESA Compliance

Recently there have been proposals to exempt small landowners from the ESA, or allow them to separately pursue consultations with the Fish and Wildlife Service under section 7. Small landowners are looking for relief in the form of a simpler, less burdensome process. Fortunately, regional HCPs provide just such assistance in fulfilling the ESA requirements for small landowners. Small landowners benefit more than any other group from having broad permits rather than site specific consultation. Regional HCPs not only create an economy of scale, but they also provide a more accurate, efficient, and cost effective way of regulating than tract by tract in individual consultations. By far, the best solution is to invest broadly in regional HCPs, such as through the funding mechanism discussed earlier.

#### IV. CONCLUSION

I hope this testimony has shown through a regional example that HCPs are an effective solution to managing and reconciling conflicts under the ESA. While essen-

tially sound, the effectiveness of HCPs could be enhanced.

Finding answers to the difficult questions addressed by HCPs will never be a simple task. This does not mean that we should abandon them as a solution. Instead, focusing more resources, science and conflict resolution techniques on HCPs will bring together governments, landowners and conservationists to make environmental permitting more efficient while protecting the irreplaceable species and ecosystems that are our natural heritage.

I appreciate the opportunity to share my views on behalf of The Nature Conser-

vancy and would be pleased to answer any questions you may have.

STATEMENT OF LINDELL MARSH, OF SIEMON, LARSEN & MARSH LAW OFFICES

#### INTRODUCTION

Chairman Graham and members of the Subcommittee on Clean Water, Fisheries and Wildlife: I am Lindell Marsh, a partner in the Orange County, California office of Siemon, Larsen & Marsh. I appreciate the opportunity to testify on incentives for the conservation of wildlife on privately owned lands in urbanizing areas (recogniz-

ing that the impacts of urbanization are significantly different than those of silva culture and fishery).  $^{\rm 1}$ 

Over the past quarter of a century, I have represented primarily landowners and developers, more recently and increasingly as a "facilitator", assisting in the resolution of conflicts between economic development and wildlife concerns. In 1980, on behalf of the owner of the greater portion of San Bruno Mountain, (located south of San Francisco), I proposed the first "habitat conservation plan" ("HCP")—as a way to reconcile a major residential development with concerns regarding the conservation of several species of butterflies listed, and proposed for listing, under the Federal Endangered Species Act (the "Act"). In retrospect, it is now clear that the San Bruno HCP was part of a major paradigm shift in this country toward collaborative processes to overcome our highly fragmented and adversarial system of land use decision-making. Watershed planning, as recently proposed by your Committee in Senate Bill 2093, is another variant of this paradigm.

In 1982, your Committee translated the idea underlying the San Bruno Mountain approach into section 10(a) of the Act. That amendment authorized the taking of endangered species incidental to a conservation plan that would not appreciably reduce the likelihood of the continued survival and recovery of the species in the wild. Of the 18 HCPs that have followed the amendment, I have been a major participant in six, including the very first—the San Bruno Mountain HCP, as well as the first (and I anticipate the second and third) HCPs for the California Gnatcatcher in Southern California.

<sup>&</sup>lt;sup>1</sup>By analogy to concepts of real property, wildlife interests can be co-managed to an extent with the timber and fishery operations, while urbanization requires a partition—lands for houses and lands for wildlife.

<sup>&</sup>lt;sup>2</sup>Bean, Reconciling Conflicts Under the Endangered Species Act, World Wildlife Fund (1991); Marsh, Focal Point Planning, 5 Zoning and land use controls, Matthew Bender (1987); Thornton, Searching for Consensus and Predictability: Habitat Conservation Planning Under the Endangered Species Act of 1973, 21 Environmental Law (1991).

<sup>&</sup>lt;sup>3</sup> Marsh, Conservation Planning Under the Federal Endangered Species Act: A new Paradigm for Conserving Biological Diversity, presentation to the Bio-diversity Legal Forum, Defenders of Wildlife, Washington DC., (March 11, 1994).

I owe a debt of appreciation to the Chairman, Senator Graham, then Governor of Florida, as well as the current and past Directors of the Florida Department of Community Affairs, Linda Shelley and Dr. John DeGrove, for their assistance in empowering by executive order a process to develop an HCP for North Key Largo Florida. This process resolved a very heated conflict between economic development and conservation concerns involving four endangered species, as well as wetlands and native hardwood hammock occupying the 12 mile key. While a conservation plan was developed by the working group, only two section 10(a) permits were issued for small parcels, with the major portion of the key being acquired by the State pursuant to the plan under its Conservation and Recreation Lands ("CARL") program. There are a number of lessons from this process. Two are particularly significant to our discussion. The first resulted from a late night trip into the steamy hardwood hammock of North Key Largo by the working group. My client, a very bright stockbroker/landowner from New Jersey, had always complained about the inefficiency and costliness of the process "all to save a rat" (the North Key Largo Woodrat, a federally listed endangered species). That night he joined in using a radio signal finder to find a rat that had been equipped with a radio transmitter as part of a study of the species. He finally found the rat under a downed log and, while he continued to complain, rightfully, about the costs and inefficiency of the process, he never again said anything negative to me about the need for conserving the species. The process developed an understanding by the working group of both the conservation and economic concerns involved. The second lesson occurred after the working group had reached consensus on a plan with two alternatives: development in "nodes" or the purchase of the bulk of the key by the State. Both alternatives were acceptable to my clients because they would be paid the fair market value of their land. With this consensus, both the landowners and the conservationists went hand-in-hand to Tallahassee to lobby the State legislature. I recall the speaker of the lower house saying that this was the first time he had ever seen the Audubon Society lobbying with the land developers. We were successful in our lobbying effort; the acquisition alternative was implemented and I learned the power of the collaboration resulting from the process.

The HCP process accepts the basic policy objective of the Act—that the Nation's biodiversity should be conserved, and assumes that this objective will be difficult. if not impossible, to attain utilizing our historic project-by-project, adversarial. quasi-judicial processes. This old process is like trying to fight a forest fire sweeping across the landscape at the time when the flames-of investment backed expectations—are highest and our flexibility and options are at their lowest. There is a broad consensus that the result has been fragmented and ineffective "mitigation"; very expensive and often unsuccessful attempts to save "endangered" species; and, a great deal of frustration and conflict.

The collaborative, focused planning paradigm is different. The resulting plans are known by various names: HCPs, special area management plans ("SAMPS"), resource management plans ("Chapter 380 Plans" in Florida), watershed plans or, most recently, Natural Community Conservation Plans ("NCCP"s). They share, however, certain common elements. They all bring the constituency of interests (developers, local government, conservation interests and State and Federal wildlife agencies) to the table early, when our ability to cope with the conflict is greatest, with the objective of reconciling both wildlife and economic development concerns in the context of the plan. The resulting plan evidences the reconciliation 5 and is the basis of a formal implementation agreement which provides the participants with predictability and certainty.

Notwithstanding their promise, since the enactment of section 10(a) over a decade ago, there have only been 18 HCPs approved with more than 100 in process in the Pacific coastal states. As a result, it is critical that we fill in the concept with the elements that will allow it to achieve its promise. The remainder of my testimony

focuses on these missing critical elements.

#### Critical Elements

There are three critical factors that must be provided in order for the collaborative conservation planning concept to be effective.

First: the process must be more expeditious and less expensive.

Second: the private sector must be provided with better assurances. Third: a framework of funding must be provided.

# I. The Need for An Expeditious and Less Expensive Collaborative Process

The San Bruno HCP addressed 51 species within 3,000 acres of land, involved a handful of landowners and developers, four local agencies, two State agencies and the Fish and Wildlife Service ("Service"). It required approximately \$1.5 million, 3 years and an amendment of the Act to add section 10(a). Subsequent efforts have focused on one, and more recently, multiple species with respect to a single project (typically one to several thousand acres) or broad regions involving millions of acres, 6 with public and private sector processing costs that range from \$.5 million

Continued

<sup>&</sup>lt;sup>5</sup>These plans contemplate reconciliation, not compromise; they must comply with the standards of the Act.

<sup>&</sup>lt;sup>6</sup>The Austin, Texas (Balcones) multiple species HCP includes approximately 300,000 acres, while the Southern California NCCP planning areas include 3,840,000 acres. The cost of the Balcones HCP approached \$1 million (\$600,000 for biological studies, \$100,000 for economic feasibility studies, and the remainder for public time and expense) and has taken in excess of 5 years to date with the ultimate success of the effort still in question (leaving 12,000 acres short of the 60,000 acre objectives). In 1993, the voters rejected proposed bond funding of \$48.9 million that was to be used to implement the plan. The public agencies in Southern California have spent approximately \$10,000,000 over the past 3 years with respect to the various multiple species efforts (including the Riverside Stephens' Kangaroo Rat HCP and multiple species planning; the two NCCP plans in Orange County and the riparian habitat plans (San Diego Association of Governments), four subregional, and one city-wide (City of Carlsbad) NCCP/multiple species plans in San Diego County) and anticipate spending a total of \$15 million before completion of the planning efforts in approximately 2 years (including approximately \$5 million from the State and other sources, such as the National Fish and Wildlife Foundation). This does not include private sector costs which would probably add another \$20 to \$30 million, for a total expenditure

to more than \$4 million for each of the major project HCPs and \$20 to \$50 million for a multi-million acre regional plan. While it appears that the regional NCCP type plans are more efficient than project level HCPs, they are now very complex and difficult to implement and complete. Further, they may contemplate further project-level plans to fill in critical details. My guess is that if the process were properly organized, an HCP for urbanizing lands covering 2,000 to 5,000 acres should take 2 years and cost less than \$1 million. A large sub-regional multiple species HCP should take 3 to 4 years and cost \$5 to \$7 million (aggregating up to \$20 to \$30 million for a multi-million acre region). These estimates are intended to provide orders of magnitude and can be expected to vary significantly in a particular case. For example, as the richness of the wildlife resource or the density of the urban development decreases, the cost of the plan should also decrease.

The Question Is How Can These Plans Be Completed Faster and Less Expensively?

There are two key factors.

First: we must overcome the institutional inertia to change and embrace the opportunity provided by the collaborative planning approach; and,

Second: that change must be better managed.

Resistance to Change

The most difficult problem is overcoming the resistance to change within the existing institutions (both public and private). Until recently, within the Service, these HCPs were known as "habitat development plans". In 1990, the prevailing view within the Service shifted to the belief that the project-by-project mitigation must give way to the HCP approach as the best hope for conserving the Nation's wild-life. § Within the conservative elements of the development community, HCPs were viewed as a compromise that would preclude hoped-for wholesale changes in the Act that might somehow allow individual species to be compromised in deference to economic development.

As the result of the NCCP initiative, 9 the conservation planning paradigm has become the prime focus for national wildlife conservation efforts. To be fully effec-

in the range of \$30 to \$50,000 for multiple species planning in Southern California over a 5-to 8-year period.

Three recent private sector efforts, one focusing on only the California Gnatcatcher (a project area of 700 acres, with 125 acres of habitat), took 4 to 5 years to complete at a planning cost of roughly \$463,000. Two others, each addressing approximately 60 species within 2,000 acres, will require approximately \$3 million (Rancho San Diego HCP) to \$3.5 million (Fieldstone/Carlsbad HCP) each, and 8 and 5 years, respectively, to complete.

<sup>7</sup>The primary reason for the time delay is the lack of a "funding framework" as discussed below. The Stephens' Kangaroo Rat HCP, covering 40,000 acres in western Riverside County, has taken over 6 years, so far, with another year estimated for completion. Those working on the plan have estimated that the process could have been completed within 3 years had an adequate funding framework been available at the outset.

<sup>8</sup>When we first proposed the HCP approach for San Bruno Mountain in 1980, every level of the Service resisted the idea on the basis that it was not contemplated by the Act. With the encouragement of Senator Breaux (then Congressman and Chairman of the House Merchant Marine and Fisheries Subcommittee on Fisheries and Wildlife), the Service agreed to explore the idea. Later, while celebrating the success of the San Bruno Mountain process, one of the high-level Service participants confided in me that when we first proposed the HCP process, they were convinced that it was with a view toward "rolling them". In 1990, it was with the leadership of then Assistant Secretary Constance Harriman, Service Director John Turner and others in the Portland Regional Office that the national policy of the Service finally embraced the concept.

<sup>9</sup>The leadership for this effort was provided by the California Resources Agency and Secretary Douglas Wheeler and his deputies, Michael Mantel and Carol Whiteside, and the direction of Governor Wilson, together with support from elements of the conservation community, the more forward-looking elements of the development community, and Secretary Babbitt.

tive, however, the approach must be embraced all the way down to the staff at the field office level. 10

# Managing the Change

Historically, within the Service, authority has been pushed down to the field office level, primarily staffed by biologists. Under the old system, the field office staff viewed their lot as one of constant loss, compromise and retreat. Each negotiation was giving up part of a habitat. With the exception of the Act, they had little power. Even where they had some leverage, they viewed their role as that of advocates and negotiators—starting high, compromising and accepting less—always losing. <sup>11</sup> Understandably, they have applied this viewpoint to HCPs, seeing the HCP as a giant permit application with the plan representing the applicant's proposal; with time and delay as negotiating tools (the regional office refused to consider a plan until agreement was reached at the field office level) and the risks and burdens to be placed on the developer. Any early approaches to the regional office were viewed as "end runs".

The field office level staffs could not see that the HCP shift in paradigm required that both the development community and the wildlife agencies collaborate to work out extremely difficult issues, often of national import, and make commitments early and, in return, assume certain risks. In return for this early commitment of habitat, the development community asked for certainty, no more mitigation, and accepted a lesser amount of flexibility in developing their lands. The lower level Service staff, with understandable reluctance and without sufficient encouragement, has been hesitant to move away from the side of the pool and swim in this deeper, seemingly riskier, <sup>12</sup> water. What is required is management innovation and leadership from the top of the Department of Interior. <sup>13</sup> The fact is, however, that with the resources at hand, Secretary Babbitt probably could not have done more. In 20 years of working with the Department, I have never seen the Department staffed with a brighter, more experienced or hardworking team, a team that is stretching to address these concerns. Perhaps we simply have to endure the time that it takes to change.

<sup>&</sup>lt;sup>10</sup> Recently, I asked general counsel of a richly wildlife endowed 20,000 acre coastal ranch in northern California why they did not take my suggestion and develop an HCP for the ranch. He said that they were discouraged by Service staff at the field office level who disfavored the approach and preferred to deal with the wildlife issues one-by-one (leaving the future of the wildlife resources of the ranch to future uncertainty). In another instance, in discussing the delays in the processing of a plan with the regional office of Fish and Wildlife Service, the reviewing regional staffer (after the plan had been fully worked out at the field office level) indicated that a delay of 4 to 5 months to provide his comments was not unreasonable. As I watched, the jaw muscles of the Assistant Regional Director, his boss (a very straight shooter who has tried to make things work) tightened, although he said nothing. Two to three months between review meetings regarding a drafted HCP are not unusual. When these factors are coupled with frequent personnel changes, the time delays that have been required to complete an HCP (3 to 4 to 6 years) are easily understood. I have lost clients who could not understand, tolerate or afford the resulting frustration and I have no idea how or whether they ever solved their problems.

<sup>&</sup>lt;sup>11</sup>I can recall when I first began to understand the attitude of the Service field office staff. I was flying back to California from the Portland District Office with the southern California Field Supervisor. We had been at odds over a project and after a long talk he said "We are always losing. Maybe just half each time, but we never win." This was before San Bruno Mountain and it began to make me think that the process was wrong if it made the staff feel that they could only lose.

<sup>12</sup> In fact, as compared with the record of the Act to date, the Approach will be predictably more effective.

<sup>&</sup>lt;sup>18</sup> See, Bean, World Wildlife Fund report, supra, for ideas regarding specific management approaches that should be explored.

While I Question Whether Further Legislation Can Effectively Address These Issues. 14 Congressional Encouragement Would Be Helpful.

First: the command and control attitude of the Federal agencies should evolve to an attitude that the conservation plans being developed are accomplished by collaboration, the agency's as much as the applicants'. "Partnering" should be the rule.

Second: the management skills utilized by the Service should expand (internally or by partnering with others) to include land planners and economists and new management tools and concepts being explored in the private sector should be encouraged, such as "management by values", "virtual organization", and "facilitation".

Third: delay should be discouraged, while increased, legitimate, vertical issue

management should be encouraged.

Fourth: one technical point of the Act should be confirmed (by amendment of the Act if necessary). The current practice of the Service is that an HCP may cover a group of species, referred to in the HCP as "Species of Concern". In approving an HCP, the Service issues a section 10(a) permit for the listed species and an agreement promising to issue a section 10(a) permit for any Species of Concern that may be listed in the future. This is because there are some that believe that a take permit for a species cannot be issued until after the species is listed. Others, including me, believe that as with future interests in real property, the Service can issue a permit that will authorize the take of a species in the event that it is listed (provided of course that it is addressed in the HCP as if it were listed). Congress should clarify that a single permit can be issued covering listed species as well as species that may be listed in the future. This would substantially simplify the administrative process involved without affecting the substance of the Act. 15

# II. THE NEED FOR ASSURANCES

A critical component to the success of collaborative plans developed has been assurances. In conjunction with the San Bruno Mountain Plan, four local agencies, two State agencies, the Service and four major developers entered into an Implementation Agreement, providing that the developer would be required to provide no further mitigation. This model has served us well; however, some within the Service have argued that there should be an "out", for unforeseen circumstances. Thus, they would contend, while the Act requires a developer to minimize and mitigate the impacts on the species to the maximum extent practicable, he/she may be asked (in the event of unforeseen circumstances) to do even more. <sup>16</sup>

<sup>14</sup> For example, how could you legislatively set time deadlines for the completion of HCPs that may range from 2 to 200,000 acres and may legitimately take from 90 days to 5 years to complete?

<sup>15</sup> The Conference Report regarding the 1982 amendment adding section 10(a) provides as follows:

In enacting the Endangered Species Act, Congress recognized that individual species should not be viewed in isolation, but must be viewed in terms of their relationship to the ecosystem of which they form a constituent element. Although the regulatory mechanisms of the Act focus on species that are formally listed as endangered or threatened, the purposes and policies of the Act are far broader than simply providing for the conservation of individual species or individual members of listed species. . . . The conservation plan will implement the broader purposes of [the Act] and allow unlisted species to be addressed by the plan.

H.R. Conf. Rep. No. 835, 97th Cong., 2d Sess. 30.

<sup>16</sup> There are three additional points that should be considered. First, in many cases the landowner is asked to convey the conserved habitat up-front, limiting its development flexibility and its ability to provide further mitigation on-site. Second, the likelihood of the Service exercising this "out" is acknowledged to be slight (some estimate ½ to 2 percent). Accordingly, it is of small benefit to the Service and yet to the developer it is very burdensome because bankers and investors tend to deal in black and white, having a difficult time evaluating the economic effect of the biological condition. Third, referring back to the concept of "partition" between the economic development and wildlife elements of the land, once the partition is effected, it can be argued that the public sector should accept the further risk. In some respects, this reflects the idea of a—roughly proportional—sharing of the conservation burden between the developer and the var-

"Unforeseen circumstances" is a component of risk that the developer cannot shoulder (after being expected to "maximize" the mitigation provided), and that the public sector should. Congress should either make clear its intention to have this done administratively or the Act should provide for it explicitly.

#### III. THE NEED FOR A FUNDING FRAMEWORK

The most critical need is a funding framework. In Southern California, some of us have roughly estimated that the cost of conservation (exclusive of long-term management costs) is from 1.25 to 2 billion dollars. This is a large number. It is also a small number, being required over a long period of time of an economy that ranks 11th in the world—little more than the cost of a fully equipped B-1 Bomber or a full day of fighting in the Persian Gulf War.

A significant portion of this amount must be available up-front, to be drawn upon as needed. This up-front funding is critical because we need to draw lines early, to clearly articulate the lands that must be acquired—to fix expectations. It is legally difficult to do this without at the same time being prepared to purchase those lands. <sup>17</sup> While the entire funding requirement will not be required immediately, the most critical missing piece of the conservation planning paradigm is a funding framework—a funding plan that is agreed upon by the constituency of interests. <sup>18</sup>

In Southern California, exactions for single family homes commonly range between \$20,000 and \$30,000. Further exactions will be resisted and would have a significant inflationary effect. Local, State and Federal taxpayers are equally resistant to tax increases. To a large extent, this shortfall is an unpaid debt of prior development—prior urban development that used up the resource cushion, as well as the national settlement policy of the 1950s and 1960s that funded roads, navigation and flood control channels and sewer systems, but failed to fund conservation programs to offset the resource impacts of those systems. We can reasonably conclude that the shortfall is a collective unfunded burden.

# I have several suggestions:

First: The Federal share of that burden could be provided by revolving loans repayable from local revenues, similar to the current approach for waterways, flood control and sewer projects.

Second: Another element of the need could be provided by a Federal real estate transfer charge levied by local or State agencies upon the sale of lands within a Conservation Plan area. In California, this would overcome the restrictions of State enacted Proposition 13.

Third: In connection with the Intermodal Surface Transportation Energy Act (ISTEA) and other National settlement infrastructure programs, a portion could be designated for addressing the past impacts of such systems. This could be echoed at the State and local levels, including amounts required of new development. 19

ious communities (local, regional, State and national) and a belief that we cannot continue to look to the developer to shoulder all of the burdens of the commons. See, *Dolan v. Tigard*, 94 Daily Journal D.A.R. 8803, (U.S. Supreme Ct., No. 93–515, June 24, 1994)

<sup>17</sup> Although, as with the designation of State and national parks, landowners may not choose to have their lands acquired until a later time. With respect to the importance of up-front funding, see the discussion of the issue regarding the taking of private property in connection with local planning and regulation for the preservation of bio-diversity, in: Tarlock, D., Local Government Protection of Biodiversity: What is its Niche? 60 Univ. of Chi. L. Rev. 586 et seq. (1993).

<sup>18</sup> Accompanying the written testimony is a draft paper discussing the funding issued that I co-authored with Douglas R. Porter and David Salvesen entitled, Wildlife Conservation in Southern California, How Should We Pay the Piper?

19 The need for contributions by economic development and the local, regional, State and Federal communities may vary depending upon the circumstances. For example, there may be little need for Federal or State funding where landholdings are large, investment backed expectations small, sensitive resources widely spread and economic development pressure weak and in the distant future. On the other hand, there may be a greater need for State and Federal funding where, as in Southern California, there are 378 sensitive species being considered for listing Continued

Fourth: With a funding framework in place, the HCP/NCCP for an area could significantly simplify the conservation burden on the private sector. With such a framework, the elements of this plan would generally be as follows:

1. The HCP/NCCP would set forth the lands (habitat, linkages, buffers, etc.) needed within the area for long-term conservation; local regulation would prevent them from being developed <sup>20</sup>; and, the public sector would be prepared to acquire the lands so designated.

2. The funding framework would be provided, including, as suggested above, upfront funds available from Federal loans as needed, to be repaid from development impact fees and taxes and charges on regional services and supplies or other sources.

3. A regional collaborative conservation effort under the leadership of local agencies (probably under a joint powers arrangement) would acquire the lands and interests necessary at fair market value without discount for wildlife considerations and thereafter manage the lands acquired as conserved habitat.

4. Development impact fees would provide the development community's share of the funding (ideally broadly allocated to maintain a "level playing field" within the development community).

5. Given the HCP planning and funding framework, in general, development efforts would not be required to conduct further wildlife surveys or to address wildlife impacts under any environmental statements or reports, relying instead on the regional HCP/NCCP to provide for such impacts.

I am confident that with such a collaborative approach, the funding required would not be an insurmountable, or even significant, burden, and if combined with local planning that consolidates development (particularly along transportation corridors), it may in fact promote a more compact and efficient urban system, improving our ability to compete in the international marketplace.

under the Act, their habitat covers virtually all of the developable lands available, historic development has taken up much of the resource cushion and landownerships have been fragmented and with high investment backed expectations of development. The internationally respected biologist, E. O. Wilson, has identified the Southern California coastal plain as one of the 18 "biodiversity hotspots" in the world. Wilson, E.O., the diversity of life, p. 191 (Harvard University Press, 1992).

There are a number of ways to efficiently allocate the development community's burden among those affected. One approach suggested would be to require that new development provide its share of habitat conservation needed under a plan, either from the preservation of onsite or acquired off-site habitat, with the amount of habitat required being determined by the valuing of habitat for conservation purposes based on a numeric scale in comparison with the amount of habitat needed range-wide. Thus, parcels with richer habitat in more contiguous or linked parcels, or in a better configuration, would be given higher value (with the values constantly being updated to reflect changing science and the unfolding conservation strategy). Landowners could then use, acquire or sell habitat "credits".

The value of this approach is that it avoids a single purchaser (the conservation agency) that can, some would argue, control prices and dictate development timing and patterns by other-than-market forces. The problem is that it is a very complex system, with the amount of credits appurtenant to a particular parcel of land being susceptible to change over time as the HCP conservation strategy changes (based, for example, on the evolving understanding of the conservation needs of a large number of species inter-related with other land use decisions), requiring extensive surveying of individual parcels, and susceptible to subjective judgments and manipulation. Further, the practicality of the approach should be weighed against a system that simply required a developer to pay a fee and proceed. At the Federal level, proponents have suggested that certain amendments to the tax laws would be helpful to encourage this approach. See, testimony of Robert Thornton, before the Subcommittee on Environment and Natural Resources of the Committee on Merchant Marine and Fisheries of the House of Representatives, October 13, 1993, citing, Olson, Murphy & Thornton, The Habitat Transaction Method: A Proposal for Creating Tradeable Credits in Endangered Species Habitat.

 $^{20}$  The acquisition plan set forth in the conservation plan could be updated on an on-going basis based on changing circumstances, surveys and other information.

#### IN SUMMARY

The most effective conservation incentive to urban private landowners is to provide a program for wildlife conservation that is quick, efficient and equitable and that provides predictability. The HCP collaborative planning approach offers that promise, but the following critical elements must be addressed:

• The process must be made quicker and more efficient;

Assurances must be given that once the conservation quid pro quo is provided, the landowner will no longer be subject to the risk of "unforeseen circumstances";

• A single permit should be available covering listed species as well as species that may be listed in the future (provided that they are addressed in the

HCP as if listed); and,

• Of greatest importance, a "funding framework" must be established, providing for the sharing of the conservation burden among development and the

local. State and Federal communities.

Much of this agenda is occurring administratively and should be encouraged. Some requires legislation. It is critical that we address these elements collaboratively and comprehensively. The result will not only be the most economically efficient, but will predictably result in changes to our urban systems that will make our urban areas and the Nation more economically competitive in the world market-place—providing for sustainable development.

BOARD OF DIRECTORS
Stathaniel Reed
President
Mary Kumpe
Vice President
John DeGrove
Vice President
Arsenio Milian
Secretary
Jerry Sokolow
Tressurer

Harry Adley Jim Apthorp Bernard Budd Jack Conway



Gay Culverhouse Robert Davis Bill Frederick Robin Gibson Preston Haskell Lenore McCullagh Bob Parks Carol Rist Bruce Samson Earl Starnes Victoria Tschinkel Jack Wilson Carl Feiss, Emeritus

Jim Murley Executive Director

August 11, 1994

The Honorable Bob Graham Chairman, Subcommittee on Clean Water, Fisheries and Wildlife United States Senate 524 Hart Senate Office Building Washington, D. C. 20510-0903

Re: Testimony of Lindell L. Marsh Before the Subcommittee, July 19, 1994

Dear Senator Graham:

As executive director of 1000 Friends of Florida, I would like to comment on the testimony of Lindell Marsh before the Subcommittee on Clean Water, Fisheries and Wildlife on July 19, 1994, regarding "Incentives for Wildlife Conservation on Privately Owned Lands Under the Endangered Species Act."

While there are a number of points in Mr. Marsh's testimony with which we concur, there is one of particular importance—the need for a "funding framework". We agree with him that the cost of wildlife conservation is very small in comparison with the magnitude of our economy, and that the problem is we have not found a way to incorporate funding for conservation into the financial fabric of the nation. Without funding, Florida's premier growth management and land preservation programs would have failed.

We concur with Mr. Marsh that what is needed is a collaborative process, involving the many stakeholders, which will cooperatively develop a national "funding framework" for wildlife conservation, including state initiatives similar to Preservation 2000.

With such a framework in place, it will be far easier to develop watershed and wildlife conservation plans that enjoy widespread support and are possible to implement.

The Honorable Bob Graham August 11, 1994 Page Two

We encourage you to provide the leadership you provided in Florida to support efforts to convene the various stakeholders to collaboratively develop a national funding framework for wildlife conservation planning.

Sincerely.

James F. Murley

JFm/jd

cc: Dr. John DeGrove, President, 1000 Friends of Florida



August 3, 1994

Lindell L. Marsh, Esq. Siemon, Larsen & Marsh 19800 MacArthur Boulevard, Suite 350 Irvine, CA 92715

Re: Comments on your testimony of July 19, 1994 to the Subcommittee on Clean Water, Fisheries and Wildlife of the Committee on Environment and Public Works

Dear Mr. Marsh:

Thank you for the opportunity to comment on your testimony of July 19, 1994 to the Subcommittee on incentives for wildlife conservation on privately owned lands. As Chairman of the Endangered Species Committee of the Southern California Building Industry Association (BIA/SC), a land developer and a consultant to landowners and developers on resolving conflicts with endangered species, I have been asked by the National Association of Home Builders to provide the following comments.

BIA/SC and NAHB agree with the basic elements of your testimony -- the value of collaborative planning that reconciles conservation and economic development; the need to change the approach within the Department of Interior to embrace this concept; the need to provide assurances to the landowner and developer; and, the need to develop a national "funding framework." However, there are several detailed points that deserve emphasis, and others as to which we strongly disagree. In summary, they are as follows:

- While you suggest that the Department of Interior needs to change to move away from "command and control" and toward collaborative approaches, you conclude that no further legislation is necessary to encourage this. We strongly disagree, believing that there is a need for Congressional legislative direction.
- We concur and would like to emphasize the need for definitive assurances -- certainty and predictability -- to landowners that once agreed upon conservation has been provided under a conservation plan, it can be secure in knowing that it will not be asked to do more.

1330 S. Valley Vista Drive Diamond Bar, CA 91765 (909) 396-9993 Fax (909) 396-9846 Lindell L. Marsh, Esq. August 3, 1994 Page 2

Finally, we strongly concur with you that there is a critical need for a national "funding framework" to address this problem. We would add, however, that we are extremely leery of the use of impact fees in that our experience has been that while the "sharing" of the conservation burden has often been discussed, it is the development community that is asked to shoulder the entire burden (commonly the unpaid debt of prior nationally supported development).

The following discusses these points in greater detail:

## I. The Need for An Expeditious and Less Expensive Collaborative Process

You are accurate in your conclusions regarding the costs to process a Habitat Conservation Plan (HCP) and Section 10 permit. These costs are exhorbitant and prohibitive to most landowners and yet, Section 10 is the only permit available to most landowners. A more effective permit program is necessary.

It is essential we understand that the millions of dollars wasted to develop and process HCPs, if available at all, are funds that could otherwise be spent more effectively on habitat acquisition. For example, you suggested the \$1 million cost of a 2,000-5,000 acre HCP could instead be used to acquire an additional 200 acre preserve at \$5,000 per acre. There are limited funds available for habitat conservation and we cannot afford to waste them.

Managing the Change: We strongly disagree that "perhaps we simply have to endure the time that it takes to change." Such endurance can be viewed as an endorsement of the wasted resources, continuing conflict and lack of achieving both conservation and development objectives. Congress must: 1) recognize the ineffectiveness and improprieties of the Endangered Species Act's (ESA) current implementation; 2) clearly direct the Department of Interior's Fish & Wildlife Service (FWS) to work cooperatively towards endorsing HCPs; and 3) direct every available resource to accomplishing these critical elements.

The intent of this hearing was incentives for wildlife conservation on privately owned lands. All the creative incentives are useless unless the fundamental structure is in place. It would be useless to hold out the incentive of financial relief to a landowner if he must first waste his time and dollars to deal with ineffective, undirected bureaucracy that considers private landowner permits (through HCPs) as discretionary, non-mandatory actions.

Managing the change and creating incentives starts with Congress, and particularly, the members of this Committee. Legislation can in fact effectively address these issues. More than encouragement is necessary. Please consider:

Lindell L. Marsh, Esq. August 3, 1994 Page 3

- Time frames are a statement that HCPs are non-discretionary. Time limits on the processing of HCPs can be reasonable, fair and effective. I would be pleased to work with your staff members on time frame recommendations.
- 2) Congress should not only encourage FWS participation as a partner, but they should change the process. For example, with FWS as a partner and where there is concurrent public participation in creating a plan: a) subsequent NEPA processing would be redundant and HCPs should therefore be exempt; and b) FWS would be encouraged to bring solutions to the HCP, whereas the current process constrains their participation.

I wish to further emphasize the simplicity and good sense of Mr. Marsh's fourth recommendation. One permit issued at the time the HCP is approved would dramatically simplify the process.

#### II. The Need for Assurances

There is an inherent inequity in current HCP law that requires a landowner to make commitments "in perpetuity" for conserved lands and yet he does not receive a commitment in perpetuity for land he expects to use. Such law supports the perverse incentive of a landowner to destroy any habitat value on the development areas of the HCP as soon as possible. Interim habitat values can be an important component of conservation. Full assurances of future use of his property can provide a landowner: 1) incentives to proactively conserve habitat by avoiding business disruption in the event species may be listed on his property; and 2) incentives to provide interim habitat on future development lands.

Authority to issue full assurances can be provided by Congress in at least three ways. First, Congress can authorize that if unforeseen circumstances occur, the public will bear the cost of protecting that species. Second, Congress can fund an "insurance" program that sets aside money for use in the event unforeseen circumstances necessitates additional funding. Third, Congress can authorize the FWS to consider development areas of an HCP "as though taken" at the time the HCP is approved. When a subsequent listing of a species occurs, a prohibition against take would not apply to landowners who earlier had proactively conserved habitat under an approved HCP.

# III. The Need for a Funding Framework

We agree the most critical need is a funding framework and we agree with most of your recommendations regarding this critical element.

Lindell L. Marsh, Esq. August 3, 1994 Page 4

However, we are extremely leery of proposals to impose development fees or other funding mechanisms that place the unfunded federal mandates of ESA on the backs of new home buyers. The Riverside County Chapter of BIA/SC endorsed the Steven's Kangaroo Rat HCP and the use of impact fees on the basis of equally shared participation from the state and federal governments. To date, \$29 million has been collected from development fees and no significant state or federal funding has occurred, or is likely to occur, in the future. Our worst fears were realized.

The BIA/SC also takes issue with local regulation preventing development of lands when funds are not available to acquire these regulated lands for species protection. Here again, experience illustrates the abuse of regulatory power, lack of agency accountability, and unfulfilled promises of expeditious processing designed to remedy overregulation.

#### SUMMARY

In summary, the outline of your testimony is sound, but the concerns emphasized above will prevent this nation from achieving its conservation goals if they are not adequately addressed. The Building Industry Association of Southern California is committed to accomplishing conservation objectives within the context of fairness, expeditious process and economic development. We would be pleased to work with you to further these objectives.

Finally, I am enclosing a copy of the testimony that I provided to the Merchant Marine and Fisheries Subcommittee on this topic on June 16, 1993.

Sincerely.

Edwin Sau Chairman

**Endangered Species Committee** 

enclosure

## ENDANGERED HABITATS LEAGUE

Dedicated to the Protection of Coastal Sage Scrub and Other Threatened Ecosystems

Dan Silver • Coordinator 8424A Santa Monica Blvd. #592 Los Angeles, CA 90069-4210 TEL/FAX 213•654•1456



July 25, 1994

26 ---

Lindell Marsh Siemon, Larsen and Marsh 19800 MacArthur Blvd., Suite 350 Irvine, CA 92715

RE: Incentives for Wildlife Conservation on Privately Owned Lands Under the Endangered Species Act

Dear Mr. Marsh:

The Endangered Habitats League is an organization of Southern California conservation groups and individuals dedicated to ecosystem protection and improved land use planning. We are active participants in all seven multiple species planning efforts ongoing in our region, as well as the State of California Natural Communities Conservation Planning program (NCCP). As you know, these efforts seek to resolve endangered species conflicts via advance, ecosystem planning. Because comprehensive plans would free business and local government from the uncertainties brought on by future listings, there is the support of a broad range of interests.

We have reviewed your testimony, given July 19, 1994 to the Environment and Public Works Committee of the U.S. Senate, and wish to comment upon its last section, which deals with the dire need for a federal funding framework. Such a framework - for conservation in general and for endangered species in particular - is of fundamental importance to our nation's future. Let me stress the following points:

- While our group identifies local land use regulation as the pillar of protecting natural resources on private lands, it is also true that outright acquisition is an indispensable and often large component of habitat protection. In circumstances where species have been brought to the brink, exaction of land alone becomes an insufficient mechanism.
- The cost of acquiring land for endangered species is tiny in comparison with other types of infrastructure. For example, the San Diego region will spend \$14.5 billion for road maintenance alone over the next 20 years, and a single freeway underpass in Orange County costs \$28 million. This one underpass could buy enough land to turn the Stephens' kangaroo rat HCP covering a half million acres in Riverside County from looming failure into substantial success.
- Our experience in Southern California indicates that comprehensive planning for endangered species will only become a reality under the paradigm of partnership, which includes funding. The four components of that partnership are new development, the local general public, the state, and the federal government. We concur that the unmitigated past impacts of federal highway and water projects - as well as the benefit of conservation to the nation - provides ample justification for a significant federal role.

- In our region, much of the anger directed at endangered species and the ESA would be rapidly defused if efficient and equitable funding mechanisms were in place. We wonder if Congress perceives this important connection.
- Up-front funds for acquisition are indeed necessary, and the various mechanisms and sources you have identified in your testimony (ISTEA, real estate transfer tax, etc.) all merit serious evaluation. What is missing is not money, it is the political will to access that money.

In summary the failure of Congress to fund a share of habitat acquisition for endangered species protection is shortsighted beyond comprehension, whether from a conservation or economic point of view. There is no doubt in my mind that the public would strongly support such rational expenditure. At risk is our heritage, the miracle of life on Earth, as well as what we consider a model to the world: the Endangered Species Act.

With best regards,

Dan Silver, Coordinator



#### BOARD OF DIRECTORS

Tern C Pelster Van York 

Rodger Schlickersen

Dr. Stephen R. Kelleri Comments ut

Alan W. Steinberg

Kenner of the Market Ma

programmers as

Mercons Design

Water Profession Miles of Water Brown L. L. Moseman

Wasting in 11) Free S. Musselm

Wir Cobachi

Lisa In Paterfreund

Lors Kamonda

William R Stott Ir Harrier of H Distributed Market

1101 Fourteenth Street, SW Suur 1400 Washington DC 20005

Telephone 202-682-9400 Fax 202-682-1331 the ke then

August 17, 1994

Mr. Lindell L. Marsh Siemon, Larsen & Marsh 19800 MacArthur Boulevard Suite 350 Irvine, CA 92715

Dear Lindell:

On behalf of our 85,000 members and supporters nationwide, we are happy to comment upon the proposals put forth in your July 19 testimony before the U.S. Senate Environment and Public Works Committee on economic incentives under the Endangered Species Act (ESA).
Overall, we find your testimony highly useful, though we believe there continues to be many questions that need answers before Defenders will be able to endorse any new solution(s) to private land conservation in this country.

As you are aware, we simply do not have enough baseline information about private landowner conflicts under the ESA to begin crafting legally-binding solution frameworks for the entire country. Defenders is closing this information gap by convening various stakeholders in ESA "hotspots" via public roundtables, such as our recent sessions in California. Another way we are bridging this information gap is by working through members of Congress by asking them and their aides to provide relevant information about ESA private land issues of concern. To this end, we drafted a questionnaire for the Endangered Species Coalition to send to all 535 Representatives and Senators asking them for detailed information about private land conservation in their districts and states. Along these same lines, we continue to support the Growth Management Institute-coalition effort to fund such a broader effort.

In fact, one of the concerns we have about your testimony, which is no fault of your own, is that it is geared predominantly toward southern California where the issues tend to focus on large plots of mainly "suburban" land that developers wish to utilize. While we do not land that developers wish to utilize. While we do not dispute that there is a wealth of knowledge to be learned from the southern California learning experience, we believe there are other potential conflicts -- involving rural landowners, small landowners, or other unique circumstances -- which may not easily fit into your present paradigm. For example, some situations now labelled as ESA "conflicts" may be merely misunderstandings as to what constitutes a Section 9 "take."

Nonetheless, we find your three-part outline on the critical elements of private land conservation very helpful, and have organized our comments to your testimony around them:

# 1. The Need for an Expeditious and Less Expense Collaborative Process

Perhaps the most compelling statement in this section is the need for the U.S. Department of the Interior (DOI), Fish and Wildlife Service (FWS), and other governmental wildlife agencies to actively participate in planning processes. We fully agree with your praise of Secretary Babbitt and his staff, and note that many private land conservation problems in this country can be directly traced to a more obstinate attitude in the federal agencies during the 1980s.

Further, while we fully support Secretary Babbitt in his efforts, we also believe that institutional inertia is a continued barrier to success in the area of incentives. Fundamental changes are needed in FWS and other agency cultures that facilitate, and perhaps reward, agency staff who actively engage in creative and appropriate solutions.

We would like further explanation on what you mean by "increased, legitimate, vertical issue management" on page 7 of your testimony.

#### 2. The Need for Assurances

To a large extent, we agree with the sentiments expressed here and said so last week when Secretary Babbitt unveiled the Clinton administration's new ESA assurances policy. However, if we are to give developers long term deals on species' plans, then we must give wildlife an extra margin of error when drafting the plans. In other words, the legal standards of ESA Section 10(a)(2) must be scientifically interpreted in a highly cautious manner. See, e.g., Ellen Hey, The Precautionary Concept in Environmental Policy and Law: Institutionalizing Caution, 4 GEORGETOWN INT'L ENVTL. L.R. 303 (1992). Thus, we do not necessarily agree with your characterization of future mitigation efforts under point 5 on page 11. In addition, we strongly agree with the Administration's approach that species not contemplated by a conservation plan should not be part of private land owner "assurances."

#### 3. The Need for a Funding Framework

As you plainly state, the funding framework <u>is</u> the most critical need. In general, we like your proposal (reflected partly in the Studds/Baucus reauthorizing bills) of federal revolving loans, funded primarily from local revenues. We,

however, possess four significant concerns and questions in this area:

- \* Local revenue sources, whether a real estate transfer charge or other "user" fees, must be secured before conservation plans are approved by the federal government.
- \* We must explicitly, and equitably, deal with the distinction between past development, which may have already harmed wildlife, and future development, which may shoulder the burden of protecting our wildlife remnants.
- \* Unlike our colleagues in the development industry, we are not at all convinced that land purchases, for all their advantages, should be favored over conservation plans. We believe that many of our present conservation problems stem from an attempt to somehow separate human activities from natural activities when, indeed, the two are inextricably linked.
- $\star$   $\,$  We are unclear what is meant by "broadly allocated" development fees on p. 11.

We thank you for this opportunity to comment on your testimony and look forward to continue working with you to affect ecologically sound and economically viable resolutions to conservation conflicts.

Sincerely,

William J. Snape, III

Director Legal Division Robert M. Ferris

Director

Species Conservation Division

FAU UNIVERSITY TOWER 220 Southeast 2nd Avenue Fort Leuderdale, Florida 33301 Telephone (305) 355-5255

# FLORIDA ATLANTIC UNIVERSITY FLORIDA INTERNATIONAL UNIVERSITY

Joint Center for Environmental and Urban Problems

#### SUPPLEMENTAL STATEMENT BY DR. JOHN M. DEGROVE

Testimony of Lindell L. Marsh before the Senate Subcommittee on The Environment for Clean Water Fisheries and Wildlife, July 19, 1994

I want to support in the strongest possible way Mr. Marsh's testimony before the sub-committee. In my added comments, I want to emphasize <u>four</u> points that I believe go to the heart of the values and resulting new policy directions that need to shape the reauthorization of the Clean Water and Endangered Species laws.

 It is absolutely imperative that the nation ahandon the traditional permit by permit, species by species approach to protecting wetlands, uniquely valuable uplands and endangered or threatened flora and fauna. The sub-committee is already moving strongly in that direction, and the Clinton administration, through Secretary Babbitt and others, is also supporting the watershed/habitat approach.

The reason a new approach is desperately needed is first that the past case by case approach has not worked, and second, there is a better way that needs to be widely supported at every level of government and by the private sector. That better way, featuring a collaborative as against an adversarial approach, has been outlined clearly by Mr. Marsh in his testimony.

- 2. The compromise case by case as opposed to the collaborative approach is not only failing to achieve the goals of either the private or the public sector, it has created a lose-lose attitude that causes the public agencies to delay any decision as long as possible. These endless and costly delays on where development can and cannot occur cause the private sector to fall back on court and legislative action to try to get a decision, almost never timely, always costly, and leaving all key stakeholders feeling that they lost.
- 3. The collaborative planning approach outlined by Mr. Marsh, in contrast, features a process by which key interests in the public and private sector can be reconciled, not compromised, so that a true win-win outcome can be achieved. We have enough experience with this approach to know that it can work, as clearly laid out in Mr. Marsh's testimony. The development community gets retainty and (at its best) timely decisions about where development can and cannot occur, and over an extended time period, while the public sector gets a more assured protection of cohesive natural systems, including the long term protection of substantial habitats

REPLY TO:

22U SULTHEAST 2nd AVENUE, FORT LALIDERDALE, R. 33301 (305) 355-5255 R.ORIDA ATLANTIC UNIVERSITY, SOCIAL SCIENCE BLIDS, FOOM 38B, BOCA RATON, R. 33431 (407) 367-3185 R.ORIDA INTERNATIONAL UNIVERSITY, ACADEMIC I, Room 3732, NORTH MAMI CAMPUS, NORTH MAMI, R. 33181 (305) 940-5844

TD 987147526804

P.02

Supplemental Statement Dr. John M. DeGrove

that assure the survival of both endangered, threatened, and other plant and animal species through the protection of habitats (uplands and wetlands) of sufficient size and quality to do the job.

4. The collaborative planning approach is the right one, but it is being held back by one major problem that must be solved if it is to realize its maximum benefits for the nation's economy and its environment. The lack of a stable, fair and ample source of funds has made the process too slow and uncertain. Mr. Marsh has laid out a number of options to provide the funding that is crucial to substituting collaborative processes for reconciling conflicts for the ultimately counter-productive firestorms that has dominated the process to date. Doubtless a combination of sources will be needed, but all wide ranging benefits of the collaborative planning approach will not be realized unless funding sources are identified and made available.



## National Association of Home Builders

1201 15th Street, N.W., Washington, D.C. 20005-2800 (202) 822-0200 (800) 368-5242 Fax (202) 822-0374

James R. Irvine First Vice President

August 1, 1994

Reply to: Conifer Group, Inc. 3140 S.E. Hawthorne Boulevard Portland, OR 97214

Mr. Lindell L. Marsh Siemon, Larson, and Marsh 9800 MacArthur Boulevard Suite 350 Irvine, California 92715

Dear Mr. Marsh:

I want to take this opportunity to thank you for your remarks during the July 19, 1994 hearing on Endangered Species Protection on Private Lands before the Senate Environment and Public Works Subcommittee on Clean Water, Fisheries, and Wildlife, and for this opportunity to comment. Your willingness to entertain our views is much appreciated.

I need also to thank you for offering staff of the National Association of Home Builders (NAHB) an opportunity to discuss your remarks with you prior to the hearing. As you know, NAHB has been deeply involved in the debate over the ESA reauthorization, as the regulatory reach of this important legislation affects virtually all of our 170,000 member firms. Indeed, the protection of the Northern Spotted Owl in the Pacific Northwest has set the tone for the rancorous debate over federal timber policy for the better part of a decade.

First of all, the ESA must be reformed by Congress. Although it has been described as the "crown jewel" of our nation's environmental laws, it is important that fundamental changes be implemented. To that end, I would like to respond to several comments you made in your testimony.

I cannot disagree with you with respect to the thought that Habitat Conservation Plans (HCP's) are an effective way to balance the needs of the building industry with the need for species protection. However, many people on all sides of this issue recognize that HCP's are time-consuming, expensive undertakings that often exclude small landowners. The development and implementation of an HCP depends entirely on the circumstances surrounding each plan; however, NAHB believes that, while private interests can be expected to shoulder some of the financial burden, the federal government must be required to assume the larger part of the cost when mandating the protection of a species for the public good.

I am intrigued by your idea that a "funding framework" is needed, perhaps that of a revolving loan fund, much like those used for water protection measures. This method of helping to defray the costs of species protection and recovery is worthy of exploration.

- 5 1994

"Building America's Future"

Mr. Lindell Marsh August 1, 1994 Page 2

This brings me to the issue with which I disagree most strongly — your recommendation of using impact fees and possibly a real estate transfer tax to pay for species conservation. As we are currently witnessing within the national debate surrounding health care and welfare reform, throwing money at a problem does not fix it. With particular regard to the state of our national budget, it is imperative that Congress make very tough policy decisions as to the allocation of our limited national resources. The federal government simply cannot expect the regulated community to bear the financial burden for every national policy objective.

Furthermore, it is critical that HCP development be considered a partnership, both financially and consultatively, between government and private interests. NAHB believes that the right of private interests to work with government officials on the development of HCP's from the outset of the process must be statutorily protected. In this way, the time and financial risk for the private sector is significantly curtailed.

Perhaps the greatest contributing factor to the intensity of the debate on the ESA is the perception by the regulated community that the federal government is making unwarranted listing decisions. Your testimony makes references to the "assurances" that need to be provided to the regulated community, and cites several examples where your clients (or former clients) became so frustrated with the local federal staff that any hope for an HCP was jeopardized from the beginning. You also imply that developers should be assured at the outset of HCP development what their role would be, and how much they would need to pay for the plan.

NAHB firmly believes that these assurances must be contained in the law itself. Nowhere in your statement do you express the need for the use of better science, or the need to improve upon the process through which species are listed in the first place. Some of your recommendations for the ESA may ring true after-the-fact. However, true reform of the listing process itself is needed.

Only by legislatively requiring scientific peer review and by mandating the use of "state-of-theart" scientific analysis can we be assured that listing is accurately done. Even then, non-scientific policy decisions must be made. NAHB firmly believes that these decisions must be made by Congress after the painstaking process of balancing our national priorities within the constraints of our federal budget.

I appreciate your willingness to work with NAHB, and look forward to a continued dialogue as debate on the ESA moves forward in the coming year. Species protection is a highly complicated endeavor, but I am confident that a workable solution can be developed if everyone involved continues to communicate and work together.

Please feel free to contact me with any questions or comments you may have.

Best regards,

1994 NAHB First Vice President

# COMMENTS ON TESTIMONY OF LINDELL L. MARSH BY KAREN SCARBOROUGH

At the request of Lindell Marsh, I am submitting my comments on his testimony presented on July 19, 1994 to the Senate Environment and Public Works Committee.

I am currently the Assistant to City of San Diego Mayor Susan Golding, on the Environment and Planning. I am also the Chairperson of the City of San Diego's Multiple Species Conservation Program's Working Group.

The following comments relate directly to the three critical factors delineated by Mr. Marsh pertaining to the multiple species conservation approach.

# I. The Process Must Be More Expeditious and Less Expensive

I agree that an expedited process would increase incentives for conservation yet 1 think there is a limit to the amount of time you can eliminate. It is essential to have time for the human processing of a new idea and to get the large "buy in" and consensus for a successful program. This type of an approach will not succeed if it is an edict from a city council. There has to be a consensus within the community that it is the right thing to do and that process takes time.

The expenses have been high in San Diego's program and I agree that costs should be kept to a minimum. My experience though, from having just gone through the process, shows that the amount of biological data that is required to get guarantees from the Fish and Wildlife Service, of species viability, takes time and energy to assemble, equaling money. The extensive and complicated computer modeling could possibly be altered to some degree, but without compromising the integrity of the information. I have found that the statistical information presented in the computer run summaries better enables the Service staffs decision making process in this "new approach". The environmental community also looks to these numbers for success or failure. Another area where considerable amounts of money was spent was on the financing projections, strategy and regional economic impacts. I would not jeopardize the success of the program by lessening the biological data information assemblage or the financial information available to the decision makers. These are two key pieces to the approach.

The time required to come to closure on a preserve boundary line and an implementation strategy for a program could be shortened given the tenor of the community and the elected officials. Line drawing and financing are very controversial and

often take time to work through the appropriate entities for agreement.

I do believe though that once this process is established and the ground is broken, that efforts can be expedited because each program will not be inventing it as they proceed. I can not emphasize enough the need for consensus all throughout the process

Additionally, I believe that the genesis of a program has a considerable amount to do with determining the speed and nature of the process. If a program is started strictly in response to a listing of a species, the time frame and scale of a program will be different than if an area starts a program in anticipation of a listing. The Federal agencies have to play a strong role in the outcome no matter how the program starts. In the case of the City of San Diego, we were required to do the program due to the City being out of compliance with the Clean Water Act. Subsequently we had a species listed, which only gave further credence to the programs completion. I agree with Mr. Marsh's point of the benefit of doing a program prior to the pressure of a listing and the ensuing "conflict" that arises. It is not as easy to start a program though when you are not "required" to do so. Given the complexity and cost of these types of programs, a jurisdiction pro-actively deciding to begin a process would be extraordinary.

So, while I agree that an expedited and less expensive process would be an incentive for private landowner conservation under the ESA, I do not know how much time can realistically be trimmed given the complexity of issues embodied in such processes. I do believe though that the time will be shortened as experience of agency staff expands. When the process is established, known, and the learning curve has diminished, it will go more smoothly and quickly, as it relates to the agencies.

# II. The Private Sector Must Be Provided with Better Assurances

Assurances are a crucial element to the success of this type of process. It is important that assurances be for private landowners as well as local jurisdictions.

"Better" assurances are in part a product of the biological data that is assembled and the policy of the agency. Determining how much is enough and to what extent the agency can provide guarantees requires that the field staff and the policy staff coordinate very closely. The understanding and acceptance of this new approach by agency staff is critical as well. If it is Service policy to provide assurances into an unknown future, then staff will have to learn how to get to "enough". This new direction has to be made a system wide policy for it to work. Unforeseen circumstances and the responsibility of the Service in upholding the ESA are very complicated points.

It has been noted that the City of San Diego will not sign on the line for the plan until such time that we are provided with assurances from the State and Federal governments that what we have done is enough for a specified number of species. The unforeseen circumstances debate has not been resolved and needs to be. Assurances are at the heart of the success of an approach that looks at proactive con-

servation.

# III. A Framework of Funding Must Be Provided

It is my understanding that a funding strategy is required as a part of the ESA. It is also a very important element from a local perspective in the willingness of an entity to draw lines larger than they can locally afford, knowing that the State and Federal governments are on the line to help monetarily as well. The "how much is enough" question in acreage is directly connected to the funding strategy, as seen by the local jurisdictions. A shared responsibility is important so not one sector feels it is carrying an undue proportion of the costs. The balance of regulating and buying habitat is hard to find, especially with the courts discussing nexus and the local's not wanting to raise taxes. The lack of availability of funds creates the need for a long term acquisition strategy which in turn brings legal and regulatory moratorium questions. More thought on implementation strategies Is needed, including a funding strategy, that I would be interested in pursuing. We may not be able to afford how much the Service determines is enough, what then?

# Parameter of Above Comments

I believe that there are currently no incentives for private landowners to conserve habitat under the ESA without a listing pending or existing. The penalty of not doing it is the incentive, the "stick". The Act provides for protection once endangered, not prior. A policy shift is needed for incentives to be generated through the proactive multiple species conservation approach. To protect prior to endangerment should be the goal of this new approach. The ultimate incentive to pro-actively plan is to not get the ESA stick wielded. The ESA has to continue to be seen as a stick, but carrots have to be provided to avoid the stick. Those carrots are expedited development approvals and assurances.

# Senate Committee on Environment and Public Works Subcommittee on Clean Water, Fisheries and Wildlife

Senator Bob Graham, Chairman

# Hearing on Reauthorization of the Endangered Species Act

Submission of Ted R. Brown, President of Foundation for Environmental and Economic Progress, Inc.; Vice President/General Counsel of Arvida Company

> July 19, 1994 9:00 a.m.

Room 406, Dirksen Senate Office Building

#### OVERVIEW

١

The Endangered Species Act and its regulatory administration is in need of congressional oversight, review and reform.

The Endangered Species Act is most often seen by those interested in protecting the Act as the crown jewel of environmental legislation and the last resort or "safety net" for animals and plants being lost as an unintended consequence of economic activity. On the other side, those who are fighting to reform the Act are frequently characterized as persons seeking to control private property to the detriment of a species and to use their land assets without regard for the environment generally.

The Foundation believes that neither of these extremes accurately reflects the issue, but by couching the debate in the context of these extremes, society and the Congress are deprived of meaningful alternatives which would serve to enhance species protection while at the same time affording the opportunity for one to use his or her land in a reasonable manner. The Foundation's approach, therefore, has been to ask the question "Is the Act accomplishing what it was intended to accomplish and, if not, how might it be improved?"

In formulating an answer to the question, it is first important to understand what the goal of the Endangered Species Act is. We believe it is found in the definition of the term "recovered." To quote, "the principal goal of the U.S. Fish and Wildlife Service and the National Marine Fisheries Service is to return listed species to a point at which protection under the Act is no longer required." The essential mechanics of the

Act are disarmingly simple. A plant or animal is determined to be in danger of extinction; it is then put on a list until it is recovered, and then it is taken off the list.

However, if one examines the actual recovery record, particularly how seldom, if at all, the goal of recovery and subsequent delisting has been reached, it is questionable whether or not the process is functioning as it was originally intended.

Systematic federal protection of endangered species of wildlife began with the passage of the Endangered Species Preservation Act of 1966. That Act was very limited in scope, applied only to U.S. species, and entailed little more than authority for modest land acquisition to protect habitat. The Endangered Species Conservation Act of 1969 supplemented the 1966 Act by expanding the land acquisition authority, broadening the definition of fish and wildlife to include invertebrates, requiring the listing of all species or subspecies "threatened with worldwide extinction," and prohibiting the importation of those foreign species, except for very precisely specified scientific purposes.

The Endangered Species Act of 1973 and its subsequent amendments (the "Act") extend protection to all wildlife ("any member of the animal kingdom") and plants ("any member of the plant kingdom"). The Act defines species so as to include subspecies, races, and for vertebrate species, even distinct geographic populations.

Section 7 of the Act mandates that federal agencies ensure that actions they authorize, fund, or carry out neither jeopardize the

continued existence of such endangered or threatened species nor destroy or modify the habitat of such species that is designated as "critical." Section 9 states that no person may "take" an endangered species. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect or attempt to engage in any such conduct." Implementing regulations define harm as "an act or omission which actually injures or kills wildlife, including acts which annoy it to such an extent as to significantly disrupt essential behavior patterns which include, but are not limited to, breeding, feeding or significant environmental sheltering: modification of degradation which has such effect is included within the meaning of 'harm.'" This definition of "harm" results in a significant overlap between Section 7's habitat protection provisions and Section 9's taking prohibition. Recent efforts at judicial clarification only serve to highlight the need for a legislative response (See Sweet Home v. Babbitt).

If a species is listed as threatened or endangered, an immediate series of exceedingly stringent protections come into play. Thereafter, there may be designations of critical habitat and the preparation of a recovery plan detailing the steps necessary for the species to recover. Significantly, the recovery plans that are developed are basely on agency guidance, as no regulations have been proposed or promulgated by USFWS. Finally, assuming the species has recovered, there is ostensibly a delisting certifying that there has been a population buildup so that the species is no longer threatened by extinction.

What has happened over the last twenty years is telling. It forces one to the conclusion that the Act has not lived up to its expectations. Currently, there are approximately 891 listed species, 111 critical habitat designations, 386 recovery plans, and 16 delisted species. An examination of the delisted species is informative: seven were delisted because they became extinct, five were delisted because of errors in original data (they did not qualify for listing). Of the remaining four delisted species, three are birds from Palau in the western Pacific, and one is a plant in Utah.

Thus, after twenty years of rigorous enforcement of the Act, very little has been accomplished for the benefit of endangered species, and yet the impact upon private landowners whose property houses one or more of these species can be dramatic and draconian. In its simplest terms, the Act has been coopted by many who have less of an interest in species protection, management and enhancement than in the ancillary issues of growth management, development control, · and limiting the use of natural resources. It seems clear that the name of the game for those who seek to use the Act to its fullest extent is not to develop a proactive agenda for the enhancement and preservation of species and their habitat, but to use the stick, and it is a sizeable stick, to list species with the result being that the economic system is brought into gridlock. It is essentially a cost-free, unchallengeable method that stops growth and development in its tracks; once a species is listed, it is protected irrespective of where it goes.

Efforts to modify the absolute prohibitions of the Act so as to protect endangered species insofar "as is practicable and consistent with the agency's primary objectives" have been rejected. Instead, statutory language suggests that environmental values trump any and all other considerations. The Supreme Court, in the famous snail darter case, found that Congress has "spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities" and that Congress had plainly intended "to halt and reverse the trend toward species extinction, whatever the cost." Moreover, in keeping with the presumption that the preservation of endangered species trumps any other consideration, the language of the Act permits no "ranking" of endangered species and no judgments that one species might be worth preserving more than another.

Supporters of the Endangered Species Act have defended this uncompromising posture on the grounds that the objective of the Act is to preserve not this or that particular species but the "genetic heritage" in general. This assertion certainly has some support in the legislative history of the Act, but the plain statutory language of the Act notwithstanding, it is clear that Congress did not intend species protection at any price and no matter what the consequences. Congress itself has provided for escape hatches that permit the evasion of its absolute statutory commands and the avoidance of undesired consequences in individual cases without, however, undermining in an all too obvious way the pretense that nothing short of species protection at any price will do. It is now recognized that the Secretary of the Interior may permit a taking of an endangered species by a private or public party if the taking is "merely incidental" to otherwise lawful activity and if the applicant submits a conservation plan committing himself to minimize and mitigate to the maximum extent practicable the impact upon the endangered species.

The only other mechanism to escape the consequences of the Act is raw legislative nower. On more than a few occasions Congress has overruled judicial decisions under the Act. In response to the Supreme Court's decision in the Tennessee Snail Darter case, Congress passed a bill authorizing impoundment of the Tellico River, notwithstanding the requirements of the Endangered Species Act or any other law. Similarly, when the Trans-Alaska pipeline fell victim to a court ruling, Congress ordered construction of the pipeline and foreclosed all judicial review except for constitutionality of its act. And, in the course of the Spotted Owl controversy. Congress intervened not once, but twice, finally stripping the court of its appellate jurisdiction in the Spotted Owl cases.

Clearly, neither the Secretary's limited authority to grant exemptions from strictures of the Endangered Species Act nor Congressional stopgap suspensions of the Act are a substitute for a reasoned and reasonable determination of which endangered species we wish to protect, at what price, and under what circumstances.

But efforts to make the Act more rational and to replace the absolutist commands that necessitate Congressional stopgap interventions with a statutory framework that would explicitly permit a balancing of environmental and other objectives and a

more rational determination of priorities have been continually rejected. At the risk of unfairly characterizing the position of much of the environmental community, it is the view of the Foundation that this insistence is based on a view that any statutory authorization to introduce non-environmental concerns as legitimate considerations into prioritizing objects of environmental protection would be a step toward weakening of the statute. This may or may not be true depending on one's point of view, but there is a cost to environmental protection in any event, and by suggesting that everything is equally important and everything is a priority, the Foundation believes we will, in the long run, undermine the fundamental integrity of the effort at preserving those species that are truly endangered and worth preserving.

The need in this area, as in so many areas on the environmental agenda, is for balance, for a mechanism that allows for rational decision making and accountability, the need for replacing legislative commands to protect any species at any price with an open balancing approach that would allow a fundamental consideration of a variety of factors in decision making under the Act so that allocation of resources can be made intelligently, rather than by default.

The Foundation believes three fundamental premises need to be articulated:

First, society does not have the knowledge or the resources to save all species and subspecies from extinction.

Second, society must establish priorities for helping endangered species.

Third, the resources that we have need to be used where they can be most effective. Costs apportionment is the real issue. In 1991 the top seven species accounted for over half of the federal funding.

Clearly, if one is genuinely concerned about protecting and recovering rare, threatened and endangered species, the thrust of the current Act is misguided. It is best characterized as a series of negative incentives instead of providing positive ones for protecting endangered species. Indeed, the negative incentives are especially destructive. The jeopardy section and the takings section of the Act are a warning to any government land manager or private land owner that the presence of an endangered species on your lands -- or even the existence of habitat that might be used by such a species - will likely result in a change in how one can use the land or in a regulatory taking of those lands.

No one has an incentive to make his or her land attractive for an endangered species. Even in those instances where a habitat conservation plan has been approved, there are no assurances given which guarantee the landowner that unforeseen circumstances might not be invoked to strip the agreement of its value. As a result, there is a perverse incentive structure which accelerates destruction of the very habitat the Act was designed to protect.

Finally, and not insignificantly, there is a certain disingenuousness about the listing process and the real attempt to "recover" a listed species from the brink of extinction. In a recent study undertaken by the National Wilderness Institute ["Going Broke? Costs of the Endangered Species Act, 1994] it

reviewed the cost estimates of 306 recovery plans written between passage of the Act and 1993. These plans include 8 amphibians, 72 birds, 57 fish, 58 invertebrates, 35 mammals, 135 plants and 23 reptiles covering 388 of the 853 endangered and threatened species then listed. In most cases, recovery plans include cost estimates for some of their planned actions. It is interesting to note that the total cost of these plans is \$884 million, with the highest cost plan being \$88,236,000. For purposes of comparison and to understand the somewhat

disingenuous nature of the process, the Fish and Wildlife Service's budget request for fiscal year 1995 is \$81,411,000 or some \$7,000,000 less than the recovery plan cost for the most expensive species. When you recognize that these costs are only the costs anticipated by the government expenditures and totally ignore costs incurred by the private sector, it leads the Foundation to the conclusion that the Endangered Species Act and its regulatory administration is in need of Congressional oversight, review and reform.

# I. CONSIDERATION OF ECONOMIC IMPACTS.

The Foundation believes that the United States Fish and Wildlife Service ("USFWS") should be required to engage in a cost benefit analysis in assessing the economic and social consequences of the listing. To do so, the USFWS should prepare an Economic Impact Assessment ("EIA") detailing the public and private costs to be incurred if the listing decision is to be made so that consideration of the economic impacts may be considered prior to adoption of land use restrictions.

The Act, in theory, allows for different levels of protection for endangered and threatened species. Section 4(d) authorizes the Secretary to determine whether to apply the prohibitions applicable to endangered species to threatened species. The problem is that the USFWS has adopted regulations that impose the same prohibitions with respect to all listed species, regardless of whether the species is threatened or endangered, and without regard to the

resources required to save the species, the benefit to the species of expending those resources, or the economic or social impacts of the prohibitions to be imposed. Foundation would require the Fish and Wildlife Service to engage in a cost benefit analysis in determining what prohibitions are necessarv for a particular species. considering the status of the species and its chances of recovery; the expenditures necessary to achieve recovery, and the economic and social consequences of imposing the restrictions necessary to assure its recovery.

It is clear that the Act can have substantial economic impacts on landowners and others, and yet those impacts are not now a meaningful part of the analysis. At its inception, the Act was focused on the recovery of "charismatic mega fauna" such as bald eagles, grizzly bear and the like. Consideration of economics seemed a remote concern. Today, however, the sheer number

of species listed and proposed for listing suggests clearly that these costs can no longer be ignored. Economic impacts must be considered, especially when designating critical habitat for a species and when developing the resulting recovery plan. The single guiding principle in almost every aspect of the program has been what is best for the species, and there has been little room for considering the human consequences of endangered species protection even where there is little benefit to the species and significant impact to humans.

The Foundation believes that the Act must give greater consideration to the economic impacts of endangered species protection, particularly where proposed actions do not

II. REJECT UNIFORM TREATMENT OF SPECIES, SUBSPECIES AND DISTINCT POPULATIONS

Presently, the Act protects not only species, but subspecies and populations. Future additions of subspecies and populations to the endangered list should be prohibited unless specifically authorized by a set of defined standards that are scientifically objective and reviewable and when such a listing is important for some social, biological, or economic reason.

The Act protects not only species but also subspecies and even distinct populations of a species. The Foundation believes that a hierarchy should exist; that a full species is more important than a subspecies. Species represent the fundamental units of nature and are more objectively defined, while the determination of whether something

jeopardize the existence of the species. The ultimate decision to list must include basic agency proposals for recovery management plans, including the type and degree of habitat preservation required. The USFWS should also set forth in an EIA an analysis of public and private costs to be incurred if the listing decision is to be made. including a concurrent analysis of what, if any, associated government action is required to implement the decision. It may be appropriate for the listing decision itself to be based strictly on science - i.e., is the species fact endangered. However, the consequences of that decision - i.e., what should we do about the species -- should be based in part on a consideration of the human impacts of any prospective measures.

constitutes a subspecies or a distinct population is considerably more subjective. Ongoing genetic research continues to reveal minimal differences between supposedly distinct subspecies. Thus, the biases of a particular scientist or group of scientists can result in something being classified as a subspecies or distinct population bringing the same level of regulatory control over land and habitat. Because a subspecies is by definition less numerous than a species, there is a greater tendency for subspecies to consist of relatively few individuals and to qualify for listing under the Act. Modern scientific culture tends to favor species "splitting" over "combining," but it is questionable whether that is driven by a scientific need for preciseness as opposed to a perceived need by some to stretch the impact of the Act. The Foundation believes it is more the latter than the former and for that reason, if no other, is suspect. Indeed, many of the most controversial endangered species issues in recent years have involved subspecies (e.g., the northern spotted owl, the California gnatcatcher) or distinct populations (various salmon runs in California and the Pacific Northwest). Notwithstanding these distinctions, the Act treats all of them the same.

The Foundation believes that the Act should place a higher priority on full species protection. Full species are clearly unique compared to subspecies or distinct populations and, as such, are deserving of

# III. PRIVATE PARTY LISTING PETITIONS SHOULD BE ELIMINATED

The petitioning process under the Act must be changed to eliminate the private party listing petition. The focus of the listing mechanism should be redirected to reflect a conscious conservation strategy.

There should be a priority scheme for the listing of species. However, any listing priority will not work, unless the petitioning process is modified. The USFWS has developed a priority scheme in the past (species before subspecies, etc.), but their set of priorities has been overwhelmed by the provisions of the Act that effectively require the USFWS to give immediate regulatory attention to private listing petitions. The result has been, and is, that the priority system in place today is set by the listing

the limited resources available for this Such an approach would also endeavor. minimize the extent to which substantial socioeconomic impacts would turn on the subjective decisions of biologists as to whether something should be classified as a subspecies or distinct population, allowing the better scientific evidence of species status to be controlling. The escape valve is a set of legislatively determined standards that are objective and reviewable. Subspecies and distinct populations listings would be appropriate only when they are shown to be clearly important for some recognizable and definable social, biological or economic In those instances, the USFWS could list the subspecies or distinct population; otherwise not.

petitioners, not by the reasoned or scientific analysis of USFWS or any other governmental agency.

Environmental activists are controlling the issue, and so the question that arises is not whether there should be a priority system, but who should have authority to establish the priority — Congress or an unelected set of environmental activists.

By eliminating the private petition, Congress does not disenfranchise the ability of the private citizen to advocate a listing decision; it simply changes the focus. Instead of triggering a rigorous set of time constraints under which the USFWS must review the petition, the private citizen would now

approach the USFWS as an advocate bringing rigorous science to his or her petition that a species should be listed. The USFWS, without the artificiality of deadlines constraining its review, would determine the propriety of listing or not listing based on "science," not an activist' agenda that may or may not be driven by the needs of a species or the environment.

If, on the other hand, the private listing petition is not to be eliminated, then the following information should be included in the petition to list in order to minimize the potential for abuse:

- The population, trend, range, distribution, abundance, and life history of the species;
- The factors affecting the ability of the population to survive and reproduce;
- The degree of immediacy of the threat;
- The impact of existing management efforts;
- Suggestions for future management;
- The availability and source of all information relied upon in the petition or considered by the petition;
- Information regarding the kind of habitat necessary for species survival, and a detailed distribution map;

 Such other information or factors that the petitioner deems relevant and literature citations in support of the same.

Further, it would be appropriate, particularly in light of the recent case involving the California gnatcatcher, that legislation clearly provide that all listing petitions be subjected to "independent peer review" and that all comments of peer reviewers be available for <u>public review</u> upon request.

In the final analysis, the Foundation believes that the question of prioritizing species for listing would become moot if the focus of the Act were redirected to reflect a conscious conservation strategy. In such circumstance, you would no longer be protecting a species but habitat. context, it is instructive to observe that the Act's fundamental purpose is to protect ecosystems, but all of the regulatory mechanisms under the Act are speciesspecific and are only triggered by the listing of individual species. For example, federal agencies' obligations under Sections 7(a)(1) and 7(a)(2) are not triggered until a species is listed. Similarly, the ban on "taking" does not apply until the species is listed.

The Foundation would support and encourage Congress to explicitly recognize the legitimacy of conservation plans which protect biodiversity. In doing so, Congress must also protect landowners against the legal and political turmoil associated with the listing of species not addressed in the plan, even where the plan does not protect every sensitive species and subspecies within the plan area (See Section VI).

# IV. DEFINE PROHIBITIONS ON HABITAT MODIFICATION

The burden should rest on the USFWS to demonstrate that any proposed habitat modification is counterproductive to the needs of the particular species that is endangered. The Foundation believes that greater emphasis should be placed on tailoring the restrictions on habitat modification to the circumstances and needs of a particular species so that flexibility is built into the protocols as opposed to being excluded.

With few exceptions, all species currently enjoy the same protection under the Act. The Act applies the same takings prohibitions across the board, and the same restrictions apply to all listed species regardless of the status of the species and its chances for recovery, the nature of the threats to the species, and the utility of the various prohibitions in helping to ensure the survival and recovery of the species. While this scheme has the perceived advantage of uniformity and, therefore, simplicity in its application, it more often than not results in adverse economic and other impacts which could be avoided at little or no cost to the species if flexibility were built into the system.

This problem is particularly acute with respect to habitat modification. Despite recent federal court decisions to the contrary, USFWS still considers habitat modification to be a form of "harm" prohibited under the Act when it results in injury to listed wildlife species by impairing "essential behavioral patterns." In effect, this means that landowners can disturb habitat for listed

species only at their peril unless they have a permit. USFWS has even been known to extend this prohibition to potential habitat. All wildlife species enjoy this same protection regardless of the benefits to the wildlife or the consequences to the landowner or the community of restricting use of the habitat.

The Foundation believes that greater emphasis should be placed on tailoring the restrictions on habitat modification to the circumstances and needs of a particular species so that flexibility is built into the protocols as opposed to being excluded.

USFWS currently has the authority under the Act to alter the prohibitions in the case of a threatened species by means of a "special rule," but it has used this authority on only rare occasions. Nevertheless, USFWS has demonstrated that this sort of species-specific approach can be done (e.g., Louisiana black bear, for which modified restrictions were adopted through a special rule in order to accommodate the concerns of loggers). USFWS should be required to determine the habitat modification restrictions to be applied on a species-by-species basis at the time of listing, and in making the determination, USFWS should be required to consider the status of the species and its chances for recovery, the expenditures necessary to achieve recovery, and the economic and social consequences of imposing particular The burden should be on restrictions. USFWS to demonstrate the level of restrictions necessary to protect the species and the level of habitat protection should be

co-extensive with the threat to the species when balanced against the economic and

social consequences of the proposed restrictions.

#### V. NEED FOR BETTER SCIENCE

The Act should require scientific standards that are more strict than "best available data." Information should be verifiable, reliable, accurate and quantifiably sufficient to justify a decision to list a species. Citizens should be able to legally challenge a decision to add a species to the list. Peer review of listing decisions should be required.

The Act requires USFWS to make listing and other decisions based on "the best scientific and commercial data available." In practice. USFWS gathers the available data and makes whatever decision it believes is appropriate based on that data, even if the existing data are scarce. In practice, "ties go to the dealer," or in other words, when in doubt, list. USFWS generally makes no attempt to conduct new studies or generate independent data itself. Moreover, in making its decisions. USFWS too often relies on information supplied by a few individuals. who are often the same individuals who have proposed the listing of the species in question and who have a stake in the outcome that goes beyond scientific objectivity.

It is instructive to note that many recovery plans often reveal that there is little information about the plants or animals considered endangered or threatened. For example, the Atlantic Green Turtle, which ranked number one in the developed recovery plans at a cost of \$88,236,000 contains within the recovery plan the following quote:

"More information is needed before detailed distribution maps or estimates of population number and structure can be made . . ."
"The number of nests deposited in Florida appears to be increasing, but whether this number is due to an increase in the number of nests or more thorough monitoring of the nesting beaches is uncertain."

Consider the Noonday Snail. Its recovery plan states that "No estimates of population size have been made since the exact range has never been determined." "It was listed as threatened ... because of a proposal to widen U.S. Route 19 through the Nantahala Gorge." "Essentially nothing is known about the snail's biology."

These are but two examples, but are illustrative of the Foundation's conclusion that the USFWS must be compelled to make decisions on the basis of sound science. Clearly, species have been listed as endangered or threatened which were in fact more abundant than previously believed and, clearly, species have been listed based upon scientifically unsupported decisions regarding the possible jeopardy to species and the measures necessary to minimize impacts to species from a particular action. Ultimately, the credibility of the program itself will be dependent upon the rigorousness with which the scientific justification precedes the listing decision. This is particularly true if the program is, as promoted, a program which is intent upon the recovery and ultimate delisting of threatened

endangered species. If, on the other hand, the program is designed more as a land use regulatory apparatus that has only a tangential or an assumed benefit to endangered or threatened species, the ultimate cost will be demonstrably disproportionate to the benefits achieved, thereby undermining the potential for otherwise benefiting endangered or threatened species.

Legislation should require USFWS to identify data gaps during the listing process and then to gather data to fill those gaps prior to making a final decision on the listing of the species. To the maximum extent practicable, all data must be field-checked. If any data gaps remain, USFWS must establish a deadline for collecting the data and must reassess the listing decision based on the new information. Second, legislation should require peer review of a proposed decision to list a species as endangered or threatened. The recent initiatives of Secretary Babbitt and Assistant Secretary Hall are to be applauded here.

The Foundation strongly supports improved science as a sound basis for the protection of endangered and threatened species. Peer review is a common practice in the scientific community and should be readily available for the science on which listing and other types of decisions are based. Availability of

peer review should not depend on the possibility that a USFWS official might concede that the Service may have been in error in proposing the listing. Indeed, the whole purpose of peer review is to obtain an independent and unbiased judgment on the soundness of the science on which the Service is relying, and it should therefore be mandatory.

Congress should also establish a floor with respect to the amount and reliability of data necessary to support a listing decision. There must be some minimum threshold of scientific credibility for a decision that has such dire consequences. If the minimum requirements are not met, USFWS should be required to fill the data gaps except in emergency situations and emergency situations must be determined by something more than a mere preponderance of the evidence.

Finally, the Foundation believes that balance can be achieved and scientific objectivity enhanced if citizens were afforded the right to challenge in court certain key decisions in the listing process, such as a determination on a listing petition or decision to propose a listing. Presently, that right does not exist, but to make matters worse, citizens can challenge a decision not to proceed with the listing process. Fundamental fairness requires that that balance be restruck.

# VI. RESTRUCTURE INCIDENTAL TAKE PERMITS, CONSULTATION UNDER SECTION 7 AND HABITAT CONSERVATION PLANS ("HCP'S")

The Foundation supports the adoption of procedures for the issuance of "Incidental Take Permits" where the taking is incidental to and not the primary purpose of the activity in question.

The Foundation additionally believes that a property owner should be able to request and obtain consultation with USFWS at any time and, having done so, obtain a formal written determination of the regulatory requirements for land use. Such written statements can be called a declaratory statement or clearance letter; but the intent is to provide certainty by freezing regulatory requirements at a set point in time.

The HCP process must be refocused on conservation of biodiversity so that upon adoption, all current disputes regarding effects on listed species are resolved, but equally important, all disputes on species not yet listed are also resolved.

The Act authorizes USFWS to issue permits for the taking of listed species if the taking is incidental to and not the primary purpose of the activity in question. For instance, USFWS can issue an incidental take permit for the taking of gnatcatchers as part of a residential development because the primary purpose of the activity is to build houses, not harm gnatcatchers; but the process for getting such a permit is so cumbersome as to be effectively unavailable.

There are currently two mechanisms for a landowner to obtain an incidental take permit for a project. If the landowner needs another federal permit for the project, e.g., a Section 404 permit under the Clean Water Act. the federal agency responsible for issuing the other permit would have to engage in consultation with USFWS under Section 7 of the Act to ensure that the issuance of that permit would not jeopardize the species in question. USFWS will generally issue an incidental take permit as part of the This process is consultation process. relatively quick and is the preferred means for obtaining a permit, but it can be and is used by the USFWS to leverage additional concessions in collateral permit programs such as Section 404.

If the landowner does not need any other federal permit and there is no other federal involvement that would trigger the need for consultation (e.g., federal funding), the only avenue available to the landowner is to seek a permit under Section 10 of the Act. This requires the preparation of an HCP. These plans are very time consuming and typically very expensive. One five year old plan in Southern California is as yet unapproved and has cost in excess of \$5 million to date, not including the cost of the proposed mitigation land. In the past ten years, only 28 HCP's have been approved by USFWS. Moreover, there is a tendency for USFWS to require a landowner seeking a Section 10 permit to solve all the species' problems rather than addressing the impacts related to the particular project in question. Thus, getting approval to undertake a project in the absence of Section 7 consultation is virtually impossible. No other mechanism for a take is permitted under the Act.

Legislation should make the Section 7 consultation process available landowners regardless of whether another federal agency is involved. Any landowner would be able to request consultation with the USFWS on whether a proposed project would jeopardize the species in question. If the project would not jeopardize the species, the project could go forward with appropriate conditions. This would allow all landowners to make use of this more expeditious process for obtaining authorization. Second, USFWS should be authorized to issue general permits for activities that would be expected to have minimal impacts on species. These permits would be analogous to the nationwide permits under the 404 program, but a word of caution is appropriate here. The 404 Nationwide Permits, while admittedly useful, have been eroded in actual practice. To the extent an analogous program is contemplated here, discretion of USFWS should be constrained so that the benefits of the general permits is assured.

The Foundation supports the effort to expedite the issuance of incidental take permits. The existing system creates an unsuitable double standard that turns on whether a project happens to need another federal permit. Permits should be available to all landowners on the same basis.

The existing HCP process is unworkable for all but the largest landowners, and it must be streamlined and made both cost effective and time sensitive. Congress must give definitive guidance to USFWS directing USFWS planners to prepare HCP's with a view not only for large landowners but to facilitate cost effective participation by smaller landowners to help insure timely approval of the HCP. Congress should impose time limits on USFWS review of HCP's.

The Foundation is guardedly optimistic about the future of habitat conservation plans. Given the limited amount of success over the life of the Act, a degree of skepticism is warranted. Recent efforts in the California counties of Orange, Riverside and San Diego, assisted by the new State Natural Communities Conservation Program, represents an ambitious effort to delineate multispecies conservation areas in advance of project proposals and to work out long-range programs to conserve and manage wildlife habitats. These planning efforts were stimulated in part by a recent settlement of three lawsuits in which the USFWS agreed to speed up the listing of 401 species of animals and plants it had identified as biologically imperiled. In addition, the recent listing of such species as the Steven's Kangaroo Rat and the California Gnatcatcher may affect the use of large portions of the three counties. The hope is that this union of private, local, state and federal interest in wildlife conservation may serve as a model, but given the cost involved and the uncertainty of the outcome, the Foundation believes that the approaches generally outlined above for more specific permit review and the undertaking of better science as a precondition to the listing of the species would have a more positive effect not only on the species protection as a whole but upon maintaining some level of fiscal responsibility generally. Habitat conservation planning, if it is to be workable at all, must include the following:

- a) Adequate scientific documentation to support the listing of species;
- b) Fiscally focused preservation plan;
- c) Fees and exactions to create/preserve systems must be based on rational policies that bear some rational relationship to the preserve plan;
- d) Agreement to use to the fullest extent possible publicly owned land for the preserves;
- e) A process that assures that development of land containing listed species can go forward when the HCP covering that species has been approved. The absolute essential that must emerge from any HCP to be useful to the landowner is the unequivocable right to proceed forward with the ability to use one's land;
- f) A process that provides bankable assurances that new species will not be listed under the Act's "unforeseen circumstances" section once the HCP is approved;
- g) Statutory authority for unlisted species to be included in HCP's.

One of the principal drawbacks to the present HCP process is that the statute currently contemplates HCP's for listed species only. This is being ameliorated in the California example, but at this writing the final verdict as to its workability is unknown. Presently, a landowner can spend considerable time and

money preparing a plan for protecting endangered or threatened species on a site that will allow a project to go forward, only to have another species on the site become listed once the project is underway, shutting down the project and requiring further time and expense to review the plan to account for the newly listed species. This creates uncertainty for the landowner and provides a disincentive to undertake the HCP process. USFWS has tried to address this problem by allowing candidate species to be included in HCP's. However, the statutory authority for this remains uncertain and should be clarified. In order to ensure private sector support that is critical to the HCP efforts on private property, it is essential that the Act must provide legal assurances that development activities will NOT be subject additional or mitigation requirements to protect species listed in the future beyond the requirements of the finalized HCP. The model for this approach could be the development agreement concept which provides for freezing the regulatory rules in effect at the time the agreement is approved. (For complete discussion of this idea, see testimony of Robert Thornton before Subcommittee on Environment and Natural Resources Committee on Merchant Marine and Fisheries Regarding "Incentives for Private Landowners Under the Endangered Species Act" - October 13, 1993, and concurrent paper entitled "The Habitat-Transaction Method: A Proposal for Creating Tradable Credits in Endangered Species Habitat" by Todd C. Olson, Dennis Murphy and Robert D. Thornton.)

The Act is based on a species-by-species approach. It calls for decision making related to particular species. This tends to have the effect of compartmentalizing the USFWS's approach to many issues as the

Act does not emphasize the need to consider effects on other species-both adverse and beneficial-when making a decision about a particular species, or the need to consider the consequences of prior discussions on a pend-For instance, protections ing decision. already in place for one species by virtue of an HCP may benefit other species sharing the same habitat. These other species may not need to be listed or may not need the full range of protections because of protections Yet USFWS rarely already in place. considers these types of existing safeguards. looking only to existing programs for the particular species.

A Section 10 permit issued on the basis of the HCP should be treated as authorizing incidental take of any species covered in the plan. Thus, if a covered species is ultimately listed as endangered or threatened, the landowner will already have the necessary incidental take permit.

The Foundation supports this change, which will provide greater certainty for landowners and will increase the efficiency of the HCP process. It will also provide an incentive for landowners to institute protective measures for species before they are listed, thereby benefitting the species and the environment.

Further, legislation should provide specific legislative authorization for multi-species HCP's. However, neither bill really

# VII. TAKINGS UNDER THE ACT

The Foundation endorses the idea that to the extent private property is required to be set aside for habitat necessary, to the preservation or recovery of an endangered addresses the larger issues of cost, timeliness and land use. Certainly, that needs to be addressed. The California example may be a model, but only if procedures and protocols can be put in place that enhance and recognize the need for a time-sensitive, costsensitive response that is predictable and bankable. Absent those inducements, the confrontational nature of the process is likely to continue.

This approach does not prevent listing and protecting species under the Act for areas not covered by an approved HCP. It would simply allow conservation plans that protect biodiversity to provide adequate assurances to the private sector that the rules and standards set forth in the HCP will not be altered by subsequent listing decisions.

It is clear that this suggestion recognizes the fundamental reality that private sector capital is a necessary part of the mix if we are to conservation achieve the level of management that is implicit in the Act. To obtain a commitment of that capital, the Act , must allow for reasonable tradeoffs of development and conservation, and these must be buttressed by adequate assurances that the covenants in the HCP can be enforced against public and private sector parties and will not be undone by the subsequent listing of additional species.

or threatened species under the Act, such a set aside constitutes a taking for which compensation is due under the Fifth Amendment. Further, the Foundation opposes the government's increasing propensity to assume an ability to access, inventory and otherwise examine a citizen's real property without their consent.

The evolving legislative and regulatory trend of government to assume that it can access one's property for the purpose inventorying its flora, fauna and other environmental characteristics without consent of the owner is inappropriate. If such investigations were clearly benign in their intent and the data gathered had no impact on the owner's ability to plan and implement how he or she would choose to use his or her land, then such investigations would be significantly less problematic. But where, as here, the government intends to and does use the data in making determinations which affect a landowner's ability to use their real property, then those efforts must be constrained.

Accordingly, the Foundation believes that at such time that the federal government desires to access one's real property, the federal agency representative should be required to obtain the consent of the landowner (or other party with a right to occupy the property, such as a lessee or licensee) before entering the property for any purpose, unless the government obtains that right through an administrative or judicial warrant in connection with an enforcement proceeding against the land or the landowner. Further, as and to the extent the federal government conducts an inspection of the property of a landowner, all information obtained as a result of such inspection should be made the landowner available to government's expense, and the landowner

should be allowed a reasonable amount of time to submit and have made a part of the record any contrary information or data. Only in those instances where the government is accessing the property as a result of an administrative or judicial warranty in connection with an enforcement proceeding against the land or the landowner should the right of the landowner to access the information be constrained.

The Foundation recognizes that the Supreme Court and the Federal Constitution will control the ultimate outcome of the constitutional taking issue, but given the lack of clarity and preciseness controlling Fifth Amendment jurisprudence, the Foundation has determined that there is a need for a legislative response, particularly where, as here, the landowner's activity giving rise to the regulatory constraint under the Act is wholly passive. In point of fact, it is the landowner's passivity with respect to his or her land that gives rise to the solution to the problem which the Act intends to address: that is, the preservation of habitat undisturbed and in its natural state. Much of the recent debate over "regulatory takings" has involved the notion that there is or should be a quid pro quo; that is, because land values are uniquely a creature of government largesse through the intrusion of a regulatory apparatus that establishes use characteristics and protects the same. The landowner should accept deductions in use characteristics as repayment for government "givings." This argument urging offset for "givings" carried to its logical extreme would effectively eliminate the Constitutional protection of the Fifth Amendment for government would both give and take with impunity. In the case of the intrusions of the government under the Act, however, the argument falls of its own weight for no givings have in fact been undertaken by the Ouite the contrary, the government. government is insisting that the land be left totally unadorned and in its natural state, incapable of being utilized by the landowner for any other purpose other than as a conservation area for the particular species that is identified as endangered or threatened. The argument also ignores the fact that many, if not all, "givings" are the direct result of other takings in the form of tax dollars, previously extracted and returned by government in the discharge of its duty to

promote the general welfare. In this context, it seems clear that as and to the extent a public benefit has now been conferred by the preservation of habitat necessary to the recovery and restoration of the endangered or threatened species, the public should bear the cost, and the landowner should be fully compensated for the loss which he sustains as a result of having his land removed from the utilization and/or development. The Foundation would support legislation that incorporates compensation for the landowner under the Act.

# VIII. CONCLUSION

How have we gotten there? We would suggest that one critical factor has been a change over the last few decades in how we as a society have come to view our renewable natural resources, ranging from forests and water to fish and wildlife. These are the things we are concerned about when we ask. "What will our environment be like next year, in ten years, when my grandchildren grow up?" As a society we have come to see renewable natural resources as static, fragile, destined to degradation and decline, and essentially as finite. general public has become convinced that man can only really be a source of environmental degradation and degradation is brought about by human activity, by entrepreneurship in the name of progress, by creativity inspired by the profit motive. The natural recourse for one with such a world view is to place more resources, either through regulation or direct ownership, in the hands of central authorities

who will allow use of these resources in what is considered an environmentally, economically and socially just manner. The idea is that there is one pie, it is ever shrinking, and government must control its use. The notion is further exacerbated by the double think that emanates all too frequently from segments of the environmental movement. Consider the words of one well known environmental alarmist. Steven Schneider. and I quote, "We have to offer up scary scenarios, make simplified dramatic statements, and make little mention of any doubts that we may have. Each of us has to decide what the right balance is between being effective and being honest." When viewed in this context, it is not difficult to there is so understand why misinformation and nonsensical information placed before the American public and yet the American public is asked to make an informed and intelligent decision. Trying to understand the Endangered Species Act in light of this level of confusion is illustrative of the problem. What is needed is fundamental honesty and clear articulation of the cost, both social and economic. The specific steps suggested here would move us in the right direction.

#### ACKNOWLEDGMENTS

The Foundation wishes to express its appreciation not only to its members for reviewing and commenting on this paper but, in addition, would thank Robert D. Thornton, former Majority Counsel to the U.S. House of Representatives Subcommittee on Fisheries and Wildlife Conservation and the Environment; Virginia Albrecht and Tom Jackson, general counsel to the Foundation; Mike Brennan, an environmental attorney in Washington, D.C.; James E. Wnalen of J. Whalen Associates in San Diego; Robert Rhodes, a land use and environmental attorney in Tallahassee; Robert E. Gordon, Jr. and James Streeter of the National Wildlife Institute; and Michael S. Greve of the Center for Land Use and Environmental Studies at the Claremont Institute. Each of these persons has added materially to our understanding and insight on the problems and prospects for reforming the Endangered Species Act.

I:\TED\REP\223\_1.WPD

July 26, 1994

Senate Environment and Public Works Committee Members c/o Mr. Paul Chimes 407 Hart Senate Office Building Washington, DC 20515

Dear Senators:

I would like express my views as you consider reauthorization of the Endangered Species Act. Please enter my comments into the official hearing record.

The Endangered Species Act is one of the most important pieces of legislation ever passed by the American government. It has been proven quite effective, and can be made even more effective. I feel that without such a law at the Federal level, there is little hope of protecting plant and animal species for future generations of Americans to view with awe and wonder. Therefore, I support the strongest possible reauthorization bill.

One of the most problematic aspects of any Endangered Species legislation is its implementation on private land. Because Federal lands do not necessarily exist where species are at the most risk, private lands and private landowners must play an important role. I adhere to most traditional court rulings which hold that use of private lands may be restricted in order to meet a public benefit, as long as not all reasonable economic use of the land is prevented. And if all economic use is prevented, then the owner must receive just compensation. I believe the Endangered Species Act, when implemented properly, fits within those parameters.

For the record, I strongly oppose so-called "property rights advocates" who feel any restriction of private property use constitutes a "taking." That is a radical view, which in most cases does not reflect reality. The Endangered Species Act can demonstrate that with careful planning, people and wildlife do not have to be at odds. Rather, people need a healthy environment to survive into the future. We are all part of the "environment." Any historian or archaeologist of past civilizations will verify that environmental degradation ultimately leads to societal collapse.

I urge all Senators on the Committee to support the strongest possible Endangered Species Act legislation. Thank you.

Brian E. Kolde

Yours truly,

1003 South Lierman Avenue, Apartment 106

Urbana, IL 61801

## STATEMENT OF THE NATIONAL ASSOCIATION OF STATE FORESTERS

The National Association of State Foresters (NASF) supports the reauthorization of the Endangered Species Act of 1973, and urges Congress to make positive changes in the Act which address the concerns of small private landowners while contributing to the success of the Act's programs. NASF urges the Congress to refocus the Act on it's original purpose; that of providing a safety net for species in severe biological trouble.

The National Association of State Foresters represents the directors of the State forestry agencies, four U.S. Territories (American Samoa, Guam, Puerto Rico and the U.S. Virgin Islands), as well as the District of Columbia. Our members are responsible for providing management and protection services on over 70 percent of this Nation's forest lands. The Administration of the Act can have a serious impact on the management of State trust and other lands managed by State forestry agencies, and on the nonindustrial private forest landowners on whose lands listed species occur.

The NASF endorses the goal of conserving indigenous plant and animal species. NASF urges the members of the Committee to carefully review the Endangered Species Act during the reauthorization process and consider changes that will streamline the administration of the Act and minimize the adverse effects upon individual members of society.

While NASF has not endorsed any of the numerous bills that have been introduced to reauthorize the Act, we have developed a formal position on the reauthorization process. A copy of that position is included for the record. The following written statement picks out the key points of NASF's position.

## Purpose and Policy

The Endangered Species Act is one of many laws enacted to protect natural resources and to manage public lands. Unfortunately, in it's implementation, all too often the Act has become the driving force in all land management decisions, particularly on Federal lands.

The Act was not intended to he the preeminent natural resource management policy of the United States; nor was the Act intended to he a stand-alone, all-purpose policy tool for managing ecosystems. The Act will be more effective as a safety net for species in trouble if other Federal land management and environmental laws are used to manage land and other natural resources wisely.

Congress should use the reauthorization process to refocus attention on the "safety net" intent of the Act.

## The Listing Process

NASF supports the current law's requirement that listing decisions he made solely on the basis of biological information about the species. NASF urges the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) to consider and use data gathered by State and private organizations in making listing decisions; these often represent the best available data, and can provide critical supplemental information in other cases. When a species is listed the rationale and basis for the listing decision must he made known to the public.

# Recovery Programs

NASF strongly believes that sound forest management is an important part of recovery for many plants and animals. State forestry programs and the private forestlands they influence, can help manage forests to aid the recovery of listed species and provide forest products on a sustainable basis.

Federal lands should he the primary focus of any endangered species recovery plan, with State lands in a secondary role. Private lands should be included in recovery plans on a voluntary basis through such devices as cooperative agreements, easements, tax credits, or other incentives to gain needed support and cooperation.

To further improve species recovery programs, Congress should direct the FWS and the NMFS to:

• Expedite the preparation of recovery plans to the greatest extent possible, including by increasing resources available for this purpose.

• Prioritize recovery efforts so that existing funds are used effectively.

• Provide funding for State programs to recover listed species without waiting for completion of a formal Federal plan.

• Clarify the duties and responsibilities of recovery teams; recovery teams

should have permanent status until delisting occurs.

• Expand participation in recovery planning process; improve coordination with State and local governments; encourage participation by private landowners; and better inform the public about species management and recovery.

• Recovery plans should focus on "keystone species" which are indicators of ecosystem health. Recovery plans should also he developed for multiple species that share the same habitat and management needs. Recovery plans should he "loose leaf; "i.e.—continuously revisited and updated.

# The Delisting Process

NASF believes that delisting and downlisting due to recovery of species must he pursued with the same zeal as the original listing. Delisting represents the successful implementation of the Act, from the listing to the development and successful implementation of the recovery plan.

# Administration of the Act

There are a number of ways in which better administration of the Act could avoid many of the problems which have plagued it in recent years. Secretary Babbitt's recent initiatives are a good step in the right direction. NASF would urge the Congress to consider codifying those administrative directives into law. Further, NASF makes the following recommendations:

• Section 7: NASF urges the Congress to consider making the section 7 consultation process available to private landowners. Section 7 continues to he an effective way of ensuring that Federal actions are consistent with the Act.

• Consistency: In the course of administering the Act, different FWS and NMFS regional offices, and even different personnel from within the same region, have occasionally taken conflicting positions on the same issue or point of law. This leads to confusion, duplication, and inefficiency in implementing species recovery. Consistency in administering the Act is essential for the effective use of limited resources.

• State involvement: State natural resources agencies, including but not limited to State forestry agencies, State fish and wildlife agencies and State agriculture agencies need to be more involved in all of the Act's programs—including status reviews, listing, downlisting, delisting, designation of critical habitat, all aspects of recovery plan development and implementation, section 7 consultation, and section 6 cooperative agreements. Congress should recognize a Federal obligation to work with all State resource agencies in resolving issues that arise in the implementation of the Act.

• State fish and wildlife agencies: NASF advocates a strong jurisdictional role for State fish and wildlife agencies provided by the Act. The State agency which shares jurisdictional authority with the FWS and NMFS for the protection of listed species should not be subject to the provisions of the Federal Advisory Committee Act (5 U.S.C. Appendix 2 Section 1–15). The Act should be amended to exempt the appropriate State agency from FACA, thereby ensuring full partnership status to the State agency.

## Impacts of the Act on State and Private Lands

Threatened and endangered species do not recognize property boundaries. Listing of a species invariably affects State and private lands as well as Federal lands. Private landowners seldom have the resources or knowledge to protect listed species for the public good.

If public policy requires the listing and recovery of threatened or endangered species, the government must provide incentives to adversely affected non-Federal landowners to encourage cooperation with recovery plans. Such incentives could include tax credits, cost-sharing grants and accelerated technical assistance. Non-federal landowners should not he required to pay the extra cost of carrying out public policy on their lands.

Congress should direct the FWS and NMFS to evaluate the financial losses to non-Federal landowners from species listing and recovery—and to compensate for such losses in a reasonable manner through negotiated settlement or court order.

The reauthorized Act must include a funded landowner education program. Although the vast majority of landowners seem willing to accommodate listed species needs, they are concerned about potentially high costs and burdensome regulations that attend most recovery programs.

A landowner education program, built on a stewardship foundation, would do much to allay landowner fears and encourage voluntary cooperation with species recovery plans. The Stewardship philosophy of forest management is to manage the forest in such as way as to enhance the value of all forest resources for this and future generations. This concept underlies the forest management technical assistance programs of all State forestry agencies, as well as the Tree Farm program, which is supported by the forest products industry.

#### Conclusion

The Endangered Species Act is a crucial law for the protection of valuable natural resources. While the members of NASF applaud the recent efforts of Secretary of Interior Babbitt to streamline the implementation of the Act, we urge Congress to take the additional and necessary step to codify these changes into law. We also believe the legislative changes discussed above must be enacted to improve the effectiveness of the Act.

The American people are proud of their efforts to conserve our wildlife resources. Foresters have played a major role in these efforts; earlier in this century, credible wildlife biologists were predicting the extirpation of the white tailed deer and the wild turkey. Through sound forest management, these and many other species have seen remarkable success. The recent historic downlisting of the American bald eagle would not have been possible without the cooperation of numerous small woodland owners and other forest owners and managers.

We urge the Congress to take the opportunity presented by the reauthorization process to improve the Act so that success stories like these can become more frequent.

### STATEMENT OF THE NATIONAL COTTON COUNCIL OF AMERICA

The National Cotton Council appreciates the opportunity to present testimony on the Endangered Species Act to the Senate Subcommittee on Clean Water, Fisheries and Wildlife.

The Council is the central organization of the U.S. cotton industry. Membership includes producers, ginners, warehousers, merchants, oilseed crushers, cooperatives and textile manufacturers. Most of the industry concentrates in 17 cotton-producing states, reaching from Virginia to California. The downstream manufacture of cotton apparel and home furnishings of the cottonseed products, however, occurs throughout the nation.

While cotton's annual farm gate value is a significant \$5 billion, perhaps a more meaningful measure of the industry's value to the U.S. economy is its retail impact. The business revenue generated annually by cotton and its products exceeds \$50 billion. Cotton stands above all field crops in its creation of jobs and its contribution to the U.S. economy. The industry, its suppliers and the manufacturers of cotton and cottonseed products, account for 1 of every 13 jobs in the workforce.

The members of the Council agree that it is important to protect declining species which are threatened or may become extinct. We also recognize the dependencies and linkages of a viable ecosystem. However, we believe that a balance should to be achieved when fostering these goals. The importance of human needs and human economic conditions are also significant factors in any preservation effort.

We need to ensure when developing plans to preserve species, whether endangered or threatened, that the human element is considered. People need jobs, communities need economies that grow, and the next generation's prosperity depends on an economically viable future. The idea that preserving a species may infringe on these needs creates the wrong kind of environment for a program which—carried

out in a different manner—could succeed. Success is dependent on economic consideration, cooperation, and the formation of partnerships with property owners.

Although some endangered species are found on Federal land many others reside on private property. In the case where property loses its value because of the presence of these species, and owners are compelled by Federal law to absorb the loss, then compensation is necessary.

This issue is one of the major problems associated with the present Endangered Species Act. However, there are other flaws in the Act that need to be corrected: The existing law is based on questionable data. The Fish and Wildlife

The existing law is based on questionable data. The Fish and Wildlife Service(FWS) generally conducts little independent research on proposed listing of species as endangered or threatened and therefore relies on data that in many cases can be flawed. This incomplete data is used as a basis for determining whether or not the species is listed.

The existing recovery plan process is inadequate. The ESA requires FWS to prepare a recovery plan for each listed species but specifies no content beyond conservation and survival of the species, sometimes using the worst possible scenario. A sound, viable, recovery plan requires biologic, social and economic impact analysis. It should take into consideration the cost of a measure and the benefits derived. It should be accompanied by a National Environmental Policy Act document or provide and analyze alternative conservation strategies as a functional equivalent of a NEPA document.

The Act pays little attention to problems encountered by private landowners. It establishes a permit process which requires the landowner to prepare a habitat conservation plan which focuses on mitigation and enhancement of habitat for individual members of a species. This plan and the substantive and procedural requirements for an incidental take permit are much more stringent, costly, and lengthy for private parties then are the requirements for Federal agencies undergoing consultation and obtaining incidental take statements.

The concept of a "take" is too broad. The present law defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect," or any attempt to do so. Harm has been interpreted to include acts that result in "significant habit modification or degradation where it actually kills or injures wildlife." However, the "actual injury" requirement is ignored in practice by the FWS and the courts. In fact chasing a species could be interpreted as "harm". The definition of "harm" should be limited to actual injury, and private landowners should not be unfairly required to shoulder the burden of habitat protection.

As further adjustments of the Endangered Species Act are made it is also important to include incentives for private entities to work cooperatively with the government to recover listed species. Programs like Cooperative Management Agreements by which landowners manage land for both species conservation and productive use should be encouraged. Grants should be available for habitat preservation and property owners and their neighbors should be given protection against any preservation program which would penalize them or deprive them of appropriate land use.

The members of our organization support the provisions in legislation introduced by Representatives Tauzin and Fields in the House(H.R. 1490), and Senators Shelby and Gorton in the Senate(S. 1521). The legislation makes positive changes to current law and addresses many of our concerns. We encourage the members of this Committee to cosponsor the Shelby/Gorton bill and ask that the representatives of their respective states in the House cosponsor the Tauzin/Fields bill.

In reauthorizing and amending the Endangered Species Act Congress needs to consider not just preservation programs but the impact of those programs on the localities and the people who live in them. Current law is too rigid and impractical. Economic factors and a cooperative approach are essential when considering ways to improve the preservation of endangered or threatened species.

### STATEMENT OF WILLIAM R. PAGE

Thank you for the opportunity to submit this testimony in writing. I'm a retired business person. I served as Director of Corporate Planning for Polaroid Corporation before retiring in 1985.

I'm also the founding vice president of a tree growing and marketing company which has had 18,000 acres of land in forest operation in Maine, New Hampshire, and Vermont. Over its 30 years of operation, we've put conservation easements on over 5,000 acres of this land and we've sold a mountain in southern New Hampshire to the State of New Hampshire for a State park (Little Monadnock Mountain, just south of Keene). Much of our land has become a permanent haven for endangered species. We've practiced careful selective cutting rather than clear cutting. We've planted several thousand seedlings. We've combined tree growing with recreational uses of the land. I recommend that you find additional ways to encourage this kind of business that gradually puts more and more land into preserving biodiversity while making a profit.

As you are well aware, public hearings held under provisions of the Endangered Species Act have generally surfaced a high degree of controversy which has been difficult to resolve. For the good of all concerned, it is important to make specific provisions for conflict resolution as an amendment to the Endangered Species Act. The greatest compelling reason for this is that there will be exponentially growing pressures on the remaining public and private woodlands as more and more people want to share these natural resources. Setting policy and having it endure is unrealistic. There need to be well designed on-going mechanisms institutionalized for ade-

quate public dialogue and policy updating.

In my opinion, Vermont's experience has two things to offer in this regard. The first is the forest land use planning and conflict resolution process which has been developed and used with wide public participation in Vermont in its partnership in the Northern Forest Lands Council which has addressed public policy changes affecting the 26 million acre northern forest of Maine, New Hampshire, New York, and Vermont. Out of this process has come a draft of recommendations titled "Finding Common Ground." (I am submitting a copy of this draft since it effectively describes the process.) This program is an excellent beginning on a participative process of land use planning. Its recommendations now need implementation.

I recommend that you find ways of institutionalizing the whole process, including the implementation phase, as a way of encouraging wise and profitable uses of land

for people, animals, and plants.

The second thing that I think Vermont has to offer is experience within the State government in applying problem solving and conflict resolution techniques in the criminal justice system, welfare reform, and health care reform. (I'm working with the Secretary of Human Services, Cornelius Hogan, and the Commissioner of Corrections, John Gorczyk, in applying these techniques.) As an example of the use of these, techniques, the Vermont Department of Corrections is currently implementing the provisions of a \$ 1 million Federal grant (that Senator Leahy helped us obtain) which will institutionalize local community participation in administering reparation of offenders. The techniques will provide for problem solving and conflict resolution at the heart of the crime problem and each community's role in its resolution. This program is serving as a model for criminal justice systems throughout the United States. These techniques of problem solving and conflict resolution in welfare, health care, crime, and local planning are directly transferable to the task of preserving endangered species. They are also useful in developing environmental technology and other technology that can preserve jobs as well as endangered species. My experience at Polaroid has shown that. I'm serving on the St. Johnsbury, Vermont, Business Development Committee in applying these techniques to new business development.

The techniques are based on the earlier work of Edward O. Wilson who spoke at your June 15 hearing. They provide a more accurate understanding of human nature which is why they are universally applicable. I'm working with Dr. Wilson to apply these techniques to biodiversity. In Vermont, we're finding that the conflicts over health care reform and welfare reform come about mainly because people don't understand human nature well enough. The same is true for preserving biodiversity

and endangered species.

The cooperation between Federal criminal justice system agencies and the Vermont Department of Corrections on this program is excellent. It could serve as a model for implementing the public outreach provisions of S. 921, in particular, sec-

tion (5)(c) on page 9. In the Vermont program, the Federal coordination is such that the states are learning from each other. The same thing could happen under the public outreach provisions of S. 921. I recommend that section (c) under (5) public outreach (page 9 of S. 921) be further amended to require the use of conflict resolution techniques. The Secretary would have the authority to choose among appropriate techniques and could examine what Vermont and other states are doing that would be helpful in the Federal process.

If I were a Senator interested in discussing the Endangered Species Act with my

constituents, I would consider making the following points:

1. Preserving endangered species makes good business sense when it is coupled with carefully managed selective cutting of timber (as I've illustrated with my tree growing operation in upper New England).

2. In our state, we need to take advantage of the opportunities to develop and market environmental technology. Much of this profitable technology and the jobs it will create depend on wise long-term use of forest lands and preserving endan-

gered species.

3. As your Senator, I'm going to insist on a close working relationship between the Federal Department of the Interior and the Department of Commerce in developing environmental technologies and other technologies. I'm going to insist that this cooperation include our State agencies and local business development activities. I'm going to make sure that our State gets its share of the benefits from federally sponsored research that will create jobs.

4. Several of the communities in our State have done an excellent job of thinking about their future, what they want their community to be for themselves and their children. I applaud this. I encourage people to take into account not only education,

and jobs, and health, but also what they want their environment to be.

In preparing for this type of discussion with your constituents, you may want to consider reading Edward O. Wilson's book Biophilia (human tendency to like animals, trees, and plants, the natural environment). I've found its ideas helpful in working with the Vermont State government people on environmental issues relating to highway construction, for example. (Years ago 1 gave a copy of that book to Mollie Beattie, Director, Fish and Wildlife Service.)

On No. 4 above, I've organized several community meetings in our little northern Vermont town to consider its future. I've found that people like to have a say. What has surfaced very strongly is that everybody wants to preserve the natural environ-

ment.

Several of the recommendations that I've made in this testimony could be applied to the Senate's consideration of the Biodiversity Treaty and the International Cooperation on Endangered Species, as well as the Senate's monitoring of the progress toward the policy goals produced at the United Nations Conference on Environment and Development held in Rio de Janeiro in June of 1992, and the Senate's consideration of S. 2242, the bill to create the National Institute for the Environment which was introduced on June 24, by Senator Daschle and cosponsored by nine other Senators, including Senator Jeffords.

There is plenty of goodwill in the world but there is a shortage of techniques for implementing that goodwill. I hope you will find my suggestions helpful in this regard. I think you will find them to be consistent with former Senator James

McClure's testimony on June 15.

I congratulate you and thank you on your willingness to help us all in the United States to get all the benefits that nature can bring to us if we treat it right.

### GAO

United States General Accounting Office Washington, D.C. 20548

Resources, Community, and Economic Development Division

B-257362

July 8, 1994

The Honorable Max S. Baucus Chairman The Honorable John H. Chafee Ranking Minority Member Committee on Environment and Public Works United States Senate

The Honorable Gerry E. Studds Chairman, Committee on Merchant Marine and Fisheries House of Representatives

In late October 1993, a wildfire near Riverside, California, covered about 25,000 acres, an area more than one-half the size of the District of Columbia. The wildfire, officially called the California Fire, destroyed 29 homes. Shortly thereafter, as reported in the national news, some homeowners, along with others in the area, alleged that the loss of some homes was caused by the Department of the Interior's U.S. Fish and Wildlife Service's regulations that afford protection to the Stephens' kangaroo rat, an endangered species under the Endangered Species Act (ESA). Specifically, the homeowners alleged that a prohibition of "disking" for weed abatement—an annual process of reducing the amount of vegetation around homes to provide a protective barrier from wildfires—precluded them from adequately protecting their homes.

In light of this allegation, you asked that we determine the facts surrounding the loss of homes during the California Fire. In response to your request, we reviewed (1) the development and application of the disking prohibition; (2) the nature of the fire and the damage to homes that resulted; (3) the relationship, if any, between the disking prohibition and the loss of homes; and (4) any developments regarding the disking prohibition that have occurred since the fire.

### Results in Brief

Disking in areas known to be occupied by the Stephens' kangaroo rat was first prohibited in weed abatement standards issued by the Riverside County Fire Department in April 1989. The prohibition was adopted in light of the County Counsel's concerns about potentially violating the Endangered Species Act and the Fish and Wildlife Service's determination

<sup>&</sup>lt;sup>1</sup>A disk is an implement that loosens and turns over soil and vegetation.

that disking posed a threat to individual species. However, the County Counsel, fire department, and the Service agreed that other forms of weed abatement that do not disturb the ground, such as mowing with light equipment, would provide adequate firebreaks around homes. From the time the prohibition was adopted to the occurrence of the California Fire, no major problems or related issues publicly surfaced concerning the disking prohibition or the use of alternative weed abatement methods. However, Riverside County Fire Department officials told us they held some reservations about the disking prohibition but accepted it to avoid possible litigation.

The California Fire was one of the biggest of 21 wildfires that raked Southern California in late 1993. Fanned by winds of up to about 80 miles per hour, in its first 6 hours the fire had covered about 12,000 acres, jumped various barriers such as highways and a canal, and destroyed most of the 29 homes. A California state agency's summary of the fire showed that of the 29 destroyed homes, 18 were mobile homes that were generally considered to be substantially more fire-prone than permanent structures, and 23 showed no evidence that any weed abatement had occurred in 1993 prior to the fire. County officials and other fire experts pointed out that major damage was predictable because of the fire's magnitude in the early hours.

No data or evidence exists to conclusively determine why the fire destroyed each of the 29 homes. While some homeowners continue to believe that disking around their homes prior to the fire would have saved their homes, we found no evidence to support these views. Homes where weed abatement, including disking, had been performed were destroyed, while other homes in the same general area survived even though no evidence of weed abatement was present. Overall, county officials and other fire experts believe that weed abatement by any means would have made little difference in whether or not a home was destroyed in the California Fire

Since the fire, issues regarding weed abatement and the protection of species have been discussed and, to some extent, resolved. Service officials and Riverside County Fire Department and other county officials have recently agreed that disking for weed abatement purposes under certain conditions will be allowed. In April 1994, the Riverside County Fire Department began issuing weed abatement notices stating that disking within 100 feet of houses is authorized as a weed abatement method. According to the Service, while disking may eliminate a very limited

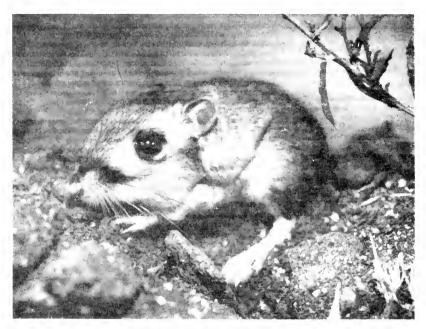
number of the Stephens' kangaroo rats, the overall survival of the species will not be threatened.

### Background

The U.S. Fish and Wildlife Service is the primary federal agency responsible for implementing the ESA. Pursuant to the act, species identified as threatened or endangered (listed species) are to be afforded protection to reduce the likelihood of their extinction and to facilitate their recovery. Section 9 of the act prohibits the taking of a listed species. However, under section 10, nonfederal entities may obtain permits allowing the incidental taking of listed species in conjunction with the development and implementation of a habitat conservation plan.

The Stephens' kangaroo rat was listed as an endangered species in 1988. The species is a small nocturnal mammal within a unique family of rodents more closely related to squirrels than to mice and rats (see fig. 1). The species is native to the open grasslands and sparse coastal sage scrub of western Riverside County and parts of northern San Diego County, California, where it lives in burrows and feeds primarily on seeds.

Figure 1: The Stephens' Kangaroo Rat



Source B "Moose" Peterson

Because the species and its habitat are primarily located on nonfederal lands and the species was also protected under California's Endangered Species Act, representatives from Riverside County and affected cities in

the western part of the county, which make up the Riverside County Habitat Conservation Agency (RCHCA); the Service; and the California Department of Fish and Game discussed matters related to developing a habitat conservation plan for the species and obtaining a permit allowing incidental takings. Concurrently with this effort shortly after the listing, the county also considered how to protect the species while also accomplishing the county's fire management/weed abatement objectives.

The California Department of Forestry and Fire Protection has characterized southern California as having "the most severe wildfire conditions in the world." To address this situation, the state established standards for weed abatement in fire-prone areas, particularly southern California, including a requirement that property owners clear flammable vegetation or other combustible growth within 30 to 100 feet of their homes or other structures. The county's fire management program, which adopts and implements the state standards, involves annual efforts to (1) notify property owners of their responsibility to perform weed abatement prior to the fire season and (2) perform such weed abatement when property owners do not. Weed abatement in western Riverside County is to occur annually from April through August, while the fire season is from May through November.

Disking Was Prohibited as a Weed Abatement Method in Areas That Were Inhabited by the Stephens' Kangaroo Rat By early 1989, the Service had identified specific areas occupied by the Stephens' kangaroo rat and had determined that disking in these areas would destroy the species' habitat and likely violate the ESA. In light of the potential conflict between property owners' use of disking for weed abatement around their homes and the act, the Riverside County Counsel and the county fire department, drawing on the Service's recommendations, developed wording to use in the county fire department's impending spring 1989 weed abatement notices to property owners in these areas.

Each weed abatement notice explained that in order to avoid a potential violation of the ESA as well as the state's species protection requirements, all portions of property requiring weed abatement should be mowed with light equipment during daylight hours, rather than disked, to avoid killing the species and destroying its habitat. The County Counsel notified the Service that the wording in the notices had been endorsed by county fire officials and that the county fire department would also use mowing rather than disking in these areas when carrying out weed abatement that property owners failed to do. As of mid-April 1989, the Service, the County

Counsel, and county fire officials believed that all issues involving weed abatement, property owners' needs, and the protection of the Stephens' kangaroo rat had been resolved.

In May 1989, the County Counsel communicated to the fire department (1) that disking for weed abatement could be used in areas not inhabited by the species but that mowing was the approved method for weed abatement in areas occupied by the species and (2) that building firebreaks in order to suppress a wildfire would be in the defense of lives and therefore would not violate the ESA.

Between June 1990 and May 1993, occasions arose when the disking prohibition was addressed by the Service. In July 1990, the Service notified the county fire department that it had become aware that disking had occurred in an area thought to be occupied by the species. The fire department expressed its understanding that the disking prohibition applied only in areas which had been previously identified by the Service. The Service, however, stated its position that any area occupied by the Stephens' kangaroo rat was subject to the disking prohibition. In responding to this matter, the County Counsel gave the Service assurance of the county fire department's compliance with the weed abatement standards.

In the fall of 1991 and later, county fire department and Service officials met to clarify and resolve issues involving the department's weed abatement policies and protection for species listed under the Ess. With regard to the Stephens' kangaroo rat, according to Service and county fire department officials, the parties agreed on the then established weed abatement standards prohibiting disking in areas known to be occupied by the species.

In June 1992, the Service received correspondence from an agricultural property owner who was concerned that a neighbor intended to disk the owner's property adjacent to the neighbor's home to remove vegetation that the neighbor believed constituted a potential hazard in the event of a wildfire. In a meeting with the individuals involved in this matter, Service officials determined that the species was present at the location, and therefore only non-disking weed abatement methods could be used to remove the vegetation. The agricultural property owner and neighbor, however, stated they would not undertake non-disking weed abatement methods. Shortly thereafter, the county fire department issued the agricultural property owner a weed abatement notice to remove the

vegetation from the area in question. The Service informed both parties that disking should not be used to remove the vegetation and offered assistance to them in removing the vegetation by alternative methods. But the offer of assistance was not accepted, and no weed abatement was performed in that location before the California Fire.

In April 1993, the Chief of the county fire department informed his battalion chiefs of the potential for an "extremely hazardous fire season," reminded them of precautions to be taken in performing weed abatement in areas inhabited by the Stephens' kangaroo rat, and cited the April 1989 weed abatement standards, adding "... if in doubt, error on the side of the environment and require hand clearing or mowing." As of this point, about 4 years after the weed abatement standards had been established and about 6 months before the California Fire erupted, no problems or concerns had publicly surfaced regarding the prohibition of disking in these areas.

The Chief of the Riverside County Fire Department and other county fire officials, however, recently told us that there were concerns within the fire department about the disking prohibition at the time of its development. However, according to the Chief, the department accepted the prohibition because of (1) the potential for litigation if disking was used and (2) his belief that mowing in areas inhabited by the Stephens' kangaroo rat would be better than no weed abatement. The Chief further stated that the department has no documentation on its reluctance to accept the alternatives to disking. Service officials told us that the county fire department never raised any concerns regarding the disking prohibition or the alternatives. The Service, therefore, believed there were no unresolved issues. Furthermore, Service officials added, the entire matter was never an issue until after the fire.

### The California Fire Was a Major Event That Destroyed 29 Homes

For over 100 years, Southern California has had a well-documented history of major wildfires. Current records suggest that major fires are likely in the area every 10 to 50 years, depending on such variables as the amount of burnable material, such as dry vegetation, and weather conditions. According to county fire officials, wildfires in the county have increased dramatically in the last 15 to 20 years. Ten years ago, one of every six homes in the county was affected by fire, versus one in every four now. These officials explained that, among other reasons, there are now more homes in the area, affecting what is referred to as the wildland/urban intermix; more people creating more hazards; more power lines, which

could eventually fall and spark major fires; a greater buildup of vegetative fuels; and more arsonists.

According to county fire officials and other fire management experts, all of the ingredients needed for a major wildfire were in place throughout Southern California in late October and early November 1993. The ingredients included (1) recent years of relatively high rainfall, which in turn led to excess growth of plants and grasses (the dried plants and grasses during the fire season became the major fuel of the fires); (2) very low humidity, generally of about 10 percent; (3) high-velocity and hot winds from desert areas; and (4) a spark. Under these conditions, according to fire experts, it was definitely no coincidence that all of the 21 Southern California fires, which occurred during the 1993 season and burned about 200,000 acres, started at essentially the same time; and the magnitude of the California Fire was no surprise to fire managers.

The California Fire erupted at about 11:30 p.m. on October 26, 1993, burned throughout the following day, and was officially contained on October 30. The fire ignited when a power line was blown down in high winds. Fanned by winds of up to about 80 miles per hour, the fire covered about 12,000 acres in the first 6 hours and destroyed most of the 29 homes. According to county fire department officials, the fire was of such force, magnitude, heat, and speed that there was no way to suppress it when it was at its full force. Fire experts explained that the speed at which the fire spread, its extreme heat, its 100 to 150-foot-high walls of flames, and its tornado-like winds make describing the fire to someone difficult if that person did not experience it. The fire repeatedly jumped many potential barriers that appeared to be reasonable forms of limiting or stopping the its spread through western Riverside County. Such barriers included highways, paved and gravel roads, cleared agricultural fields, and the San Diego Canal.

Immediately following the fire, the county fire department prepared a summary of it. According to this summary, about 25,000 acres were burned, and of the estimated 300 homes in the path of the fire, 29 were destroyed. County fire officials and other fire experts told us that, considering the magnitude of the conflagration, the number of homes destroyed could have been significantly higher.

Residents who experienced the California Fire offered a variety of descriptions of what they experienced. For example, one resident whose mobile home was lost described winds of such magnitude that she could

barely stand up during the fire. Another resident described a wind-driven fire that approached so quickly that it destroyed her mobile home in about 5 minutes.

### Prohibition of Disking Does Not Appear Related to the Loss of Homes

No evidence is available to conclusively determine the specific cause for the loss of each of the 29 homes destroyed in the California Fire. However, some homeowners continue to believe that disking around their homes prior to the fire would have saved their homes. Notwithstanding their opinions, we believe, on the basis of the experience and views of fire officials and other experts, that the loss of homes during the California Fire was not related to the prohibition of disking in areas inhabited by the Stephens' kangaroo rat.

County fire department officials said that conclusive causal information on the destruction of the 29 homes is not available for a variety of reasons. Such reasons include the inherent impossibility of reconstructing a "before" picture of the area following such devastation, the lack of resources to perform further investigations, and higher-priority matters for the department. Data from the fire department that are available regarding the 29 destroyed homes show that 23 showed no evidence of any type of weed abatement before the fire, and 18 were mobile homes, which were substantially more fire-prone according to fire department officials. Furthermore, disking had been performed around some destroyed homes. For some of the homes that survived the fire, weed abatement by various methods including disking had been performed, while for others, no weed abatement had been performed.

The professional views and judgments of county fire department officials and other experts, exemplified below, were that the loss of homes during the fire was not related to the prohibition of disking as a weed abatement method:

- A county fire department captain who was present during and after the fire reported that the fire moved with such ferocity that clearing hundreds of feet of ground would not have helped because firestorms of this magnitude can blow searing embers and ashes a mile away or even farther.
- County fire department officials stated that no one can say with any degree of certainty that disking, mowing, or any other form of weed abatement around a home would have made a difference in its survival during the fire. Clearing a 100- to 1,000-foot area around a home would likely have made no difference in the early hours of the fire, since swirling

showers of burning embers were driven by winds of up to 80 miles per hour. Such fires go where they want, and weed abatement techniques become moot.

• A University of California professor who has published numerous studies on the causes and effects of wildfires in Southern California stated that the extreme rate at which the California Fire spread, the height of the walls of flames, and the tornado-like conditions in the fire amounted to a holocaust of huge proportions. The professor further stated that the California Fire was an event that the "entire U.S. Army could not have stopped" and that the issue of disking versus mowing had little, if any, relationship to the fire's destructiveness.

County fire department officials, residents in the path of the fire, and others who are familiar with the California Fire's destruction identified a number of possible factors that they believed affected whether or not a home was destroyed in the fire. Factors possibly contributing to homes' destruction other than the magnitude of the fire itself included the burnable material, such as trash and firewood, in the vicinity of the homes; fire-prone materials in the homes' construction; a lack of standby power to pump water, the fire department's inability to respond or access properties; and adjacent hilly and rocky terrain with excess vegetation. One homeowner, paraphrased earlier, told the media that the prohibition of disking was responsible for the destruction of her mobile home. However, she later told us her belief that if more distant agricultural areas had been disked, the fire may have been contained before it reached her property. She further stated that since the rocky hillside immediately adjacent to her home could not be disked or mowed, the fire simply swept over it and onto her home, which was destroyed in about 5 minutes.

Factors possibly contributing to homes' survival included the presence of standby power to pump water on the homes and the changing force of the fire and wind conditions. One homeowner stated to the media after the fire that his last-minute disking about 120 feet beyond his property line was the only reason his home and property were saved. After further discussion, however, he acknowledged that the wind direction shifted as the fire came close to his property and that the fire shifted its path and proceeded to destroy other homes. He stated that the changing wind direction was likely as important as disking in saving his home. Similarly, another homeowner, whose mobile home survived even though the fire surrounded it, stated that her home was spared only because of the "capriciousness of the fire."

Disking Has Been Authorized as a Weed Abatement Method for 1994, but Issues Remain Unresolved In November 1993, RCHCA, county fire department, and other officials met to discuss the 1989 weed abatement standards in light of the California Fire. At this meeting, the officials generally concurred that no type of firebreak could have ensured a margin of safety for homes given the force of the fire but that disking was a preferred method of weed abatement. Shortly after this meeting, a counsel to RCHCA cautioned that any "emergency ordinances" to address the county fire department's efforts concerning weed abatement should not contradict the state's or the ESA's requirements and that the Service should be consulted before any action is taken.

On December 1, 1993, the Chief, Riverside County Fire Department, wrote to the Riverside County Board of Supervisors regarding conflicts between the ESA and the county's needs for fire protection. In that letter, the Chief stated his view that standards to protect species listed under the ESA should not be relevant in deciding what needs to be done to achieve proper fire protection. On December 6, 1993, at a RCHCA meeting attended by Service and fire department officials, property owners, and others, Service officials informally agreed that weed abatement within 100 feet of homes could be accomplished by disking or any other means and that this agreement could be formalized in the short-term habitat conservation plan for the Stephens' kangaroo rat.

On April 20, 1994, Service officials met with the county, RCHCA, and County Fire Department officials to discuss and resolve controversies and matters including the prohibition of disking. At this time, the parties agreed that disking to create firebreaks on unimproved properties in areas occupied by the Stephens' kangaroo rat could result in a violation of the ESA but that the number of species affected should not jeopardize their survival in western Riverside County. However, if species were harmed, authorization would be required under the ESA. Therefore, the Service, the county, the county fire department, and the RCHCA representatives agreed to prepare an agreement whereby the Service and the county would cooperate to avoid, or minimize to the extent practicable, any adverse impacts such disking would have on the species. In a May 23, 1994, letter to the Chief of the County Fire Department, the Service confirmed its intent to provide such authorization. At the completion of our work, the Service and the other affected parties anticipated a prompt resolution to this matter.

Our discussions with Service and county fire department officials, however, disclosed that difficult issues regarding the county's fire management program and protection for other species that are or may be

listed under the ESA remain unresolved to a large degree. County fire department officials continue to be concerned that their fire management program could be jeopardized by the Service's overall efforts to protect species and have taken the position that the department's fire prevention activities to protect people and property should not be affected by species protection actions. Service officials, on the other hand, told us they cannot now fully address matters related to potential conflicts between the county's fire management program and future efforts to protect species that may be listed because there is simply no factual information available to make such decisions. However, they stated that the ESA is very flexible on such matters, as exemplified by the cooperative agreement being prepared regarding the Stephens' kangaroo rat, and that the Service's intention in implementing the ESA has always been to allow for the protection of people and property.

### Agency Comments

We discussed the information contained in this report with the Field Supervisor and other officials of the Carlsbad, California, Service field office; the Chief and other officials of the Riverside County Fire Department; the Deputy County Counsel, Riverside County; and the Executive Assistant Director, RCHCA. These officials concurred that the information was generally accurate. In addition, Service officials and the Chief, Riverside County Fire Department, provided clarification and further explanations of some of the information; and we revised the report where appropriate in response to these comments. As agreed with your offices, we did not obtain written comments on a draft of this report.

### Scope and Methodology

In order to obtain information for this report, we reviewed pertinent documentation obtained from the Service, the Riverside County Fire Department, the California Department of Forestry and Fire Protection, RCHCA, the Riverside County Counsel, and fire experts. We also interviewed officials from these organizations as well as property owners who resided or owned property in the area burned by the California Fire. A list of the officials we interviewed is contained in appendix I. Finally, we viewed the area burned by the fire and visited a number of locations where homes had survived and a number where homes had been destroyed. We conducted our review between January and May 1994 in accordance with generally accepted government auditing standards.

As arranged with your offices, unless its contents are announced earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to appropriate congressional committees, Members of Congress representing California, the Secretary of the Interior, the California Department of Forestry and Fire Protection, the Riverside County Fire Department, RCHCA, and other interested parties. We will also make copies available to others on request.

If you or your staff have any questions, please contact me on (202) 512-7756. Major contributors to this report are listed in appendix  $\Pi$ .

omes deuffus III

James Duffus III

Director, Natural Resources

Management Issues

### Persons Contacted by GAO

The following list identifies the fire managers, biologists, and others having expertise in fire management, fires' behavior, species management, and/or the administration of Riverside County's weed abatement program whom we contacted during the course of our work.

Organization	Position	Location
Riverside County Fire Department	Chief	Perris, CA
Riverside County Fire Department	Fire Captain Specialist, Deputy Fire Marshal, Fire Protection Planning Section	Perris, CA
Riverside County Fire Department	Chief Fire Department Planner	Perns, CA
Riverside County Fire Department	Fire Captain Specialist, Hazard Reduction Program Manager	Perris, CA
California Department of Forestry and Fire Protection	State Forest Ranger II, Vegetation Management Program Coordinator	Perris, CA
U.S. Fish and Wildlife Service	Field Office Supervisor	Carlsbad, CA
U.S. Fish and Wildlife Service	Three fish and wildlife biologists	Carlsbad, CA
County of Riverside	Deputy County Counsel	Riverside, CA
Riverside County Habitat Conservation Agency	Executive Director	Riverside, CA
Riverside County Habitat Conservation Agency	Senior Administrative Assistant	Riverside, CA
The Nature Conservancy—Santa Rosa Plateau Reserve	Reserve Manager/Fire Ecologist	Murrieta, CA
Riverside County-Regional Parks & Open Space Districts	Lake Skinner Area Manager, Incident Commander	Winchester, CA
Biological Research & Consulting	Biological Resources Coordinator for Domenigoni Valley Reservoir Project	Wrightwood, CA
University of California—Riverside	Assistant Professor of Geology and Geography/Natural Resource Specialist	Riverside, CA
University of California—Riverside	Associate Professor of Geography	Riverside, CA
O'Farrell Biological Consulting	Terrestrial Ecologist	Las Vegas, NV
U.S. Forest Service—Fire Laboratory	Project Leader/Ecologist	Riverside, CA

### ENDANGERED SPECIES ACT AMENDMENTS OF 1993

### THURSDAY, SEPTEMBER 29, 1994

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Subcommittee on Clean Water, Fisheries and Wildlife,
Washington, DC.

### CONSERVATION ON PUBLIC LANDS

The subcommittee met, pursuant to notice, at 9:30 a.m. in room SD-406, Dirksen Senate Office Building, Hon. Bob Graham [chairman of the subcommittee] presiding.

Present: Senators Graham, Chafee, Kempthorne, and Faircloth. Senator Graham. I call the meeting of the subcommittee to

order.

I understand that our first witness, Senator Packwood, has another obligation at the Finance Committee. In light of that, I will defer my opening statement until we have had an opportunity to hear his remarks.

Senator Packwood?

### STATEMENT OF HON. BOB PACKWOOD, U.S. SENATOR FROM THE STATE OF OREGON

Senator PACKWOOD. Mr. Chairman, you're generous, it's only GATT.

[Laughter.]

Senator Packwood. Mr. Chairman, if you would allow me, I'd like to review a bit the Endangered Species Act. I know this is a very specific hearing and you would like me to concentrate on public lands, and I will. Because by and large it has started as a public land problem, but the Act applies to private lands as well. I was here in 1973 when we passed the Endangered Species Act. It passed without much controversy. If you read the record, you do not find the word "ecology" in the debate. This gives you an idea of how far and how fast things have changed in a generation.

But I do know when we passed it, we were thinking site-specific. We were thinking a dam, a road, a canal versus a species. It did not occur to us that the Endangered Species Act could extend over an entire forest, an entire State, an entire region. I'm not saying the law doesn't mean that. I'm not one that's been critical of the

courts. I think the courts have correctly interpreted the Act.

I think the Act should be changed. But I think the courts are correctly interpreting the Act as it is currently written. We always complain about the courts going beyond what they should. In this

case, if we don't like what the courts are deciding, we can change the statute. It's a statutory change; it's not constitutional, and we

can change it.

But as the Act is now being applied and interpreted, it is no longer the Tellico Dam versus the Snail Darter or Gray Rocks Dam versus the Whooping Crane. It is thousands and thousands of jobs. This issue came to the fore in the Pacific Northwest with the spotted owl, which is now almost a household word nationwide. Millions of acres of Federal timber land, and now scores of thousands of acres of private land have been set aside for the owls.

Depending upon whose estimate you take, you're looking at a job loss of anyplace from, in the Northwest, 35,000 to 150,000 jobs. The problem is now further exacerbated because we are finding this Act, as well as other environmental laws, adversely affecting efforts to salvage forests. We have tremendous forest fires in the Northwest. They come frequently, but we've had particularly bad fires the last couple of years, and now we're finding environmental laws are being used to prevent salvage of dead and dying timber.

So the dead and dying timber sits there, and it becomes tinder dry. To the extent that not all of the forests may have yet burned, you can almost count on all of them burning if we don't do some-

thing to manage them.

Now, I think the problem with the Endangered Species Act, Mr. Chairman, is that it's a single purpose act. We in the Northwest have managed our public lands, by and large, on a multipurpose basis. That was the management charge to the Forest Services and to the Bureau of Land Management, which are the two principal Federal land managers in the Northwest.

We said to them, here's your allotted land. Now, you manage it on a multiple-use basis for grazing, for stream enhancement, for fish protection, for timber. We had perpetual arguments, of course, as to whether one form of use was getting more use than it should

or less use than it should.

But by and large we got along on a multiple use basis. Were there arguments? And these aren't new. Were there arguments 10, 20, 30 years ago whether we were cutting too much timber or not cutting enough or could we cut in different areas? Those arguments have gone on for years. They predate the Endangered Species Act. Those arguments will go on if the Endangered Species Act was abolished.

But the Endangered Species Act itself is a single-purpose act. For the most part, no other use can be considered, and what we are discovering is that many in the environmental movement want to

use the Act for the purpose of halting all economic activity.

Example, Oregonian, February 4th, this year, headline: "Group Asks Logging Halt on all Federal Lands. The Oregon Natural Resources Council Announced That It Supports an End to all Commercial Logging on Oregon's Federal Forests." Example, headline: "Environmental Group Takes Aim at Northwest Dams." This is in the Oregonian, August 17th.

And I will quote a part of it.

A report by the Oregon Natural Resources Council questions the value of dams. Historically, questions about dams have been limited to where or whether to build them in the first place, but given what we now know, it's time to ask whether or not the existing dams should be allowed to remain.

Conspicuously missing from the Council's list of the dams they want to remove are the four mainstream Columbia River dams which form the basis of the region's Federal hydroelectric system. Those dams, Bonneville, the Dalles, John Day, McNary, give too many benefits to remove, Andy Kerr said, Andy Kerr being the head of the Oregon Natural Resources Council.

And I'm quoting what he's saying here.

We're not saying blow up all the dams. We have to apply a social equation and ask do their benefits exceed their costs. The Lower Columbia River mainstream dams should be operated differently, but they do provide a lot of power.

Now, here's the problem. He's asking the question properly. Not only as to existing dams, but new dams. And you weigh the benefits. I'm reasonably familiar, Mr. Chairman, with your State. I would wager that 100 years ago, had we had on the books the Endangered Species Act and wetlands legislation, your State and mine would not have been developed very much. Many of our highways are built along waterways or fields. Your State is almost a wetland from one end to the other. I don't say that derogatorily, but in a State where the highest point is 300 feet above sea level and bordered by oceans on all sides, you're bound to come across a wetland every place.

a wetland every place.

We have got to make a decision as to whether or not we are going to change the Endangered Species Act so that it is a balanced piece of legislation, or whether it's going to continue as a single purpose piece of legislation. Now, Edward Wilson, the entomologist at Harvard, has estimated there may be roughly a hundred million species in existence, and we've only identified 1.4 million of them.

Now, here's the problem with the Endangered Species Act, and I'm quoting from a wonderful report, now 4 years old, that Lynne Corn did over at the Library of Congress, a CRS report for Congress. It lays out in a few pages how the Act works. First, with regard to listing, and I'm quoting from this CRS report. "The Endangered Species Act expressly states that listing determinations are to be made solely on the basis of the best scientific and commercial data available." The word "solely" was added in the 1982 amendments to the ESA to clarify that the determination of endangered or threatened status was intended to be made without reference to economic factors. That's the listing process.

Critical habitat is slightly different. Once you've decided the species to be listed, then the decision must be made as to what land are you going to set aside to attempt to protect the species. Here the CRS report says, "In contrast to the listing process, in which economic factors are not to play a part, economic factors expressly may enter into the designation of critical habitat for a species. The Secretary may "exclude any area from critical habitat"—if he determines that the benefits of such exclusion outweigh the benefits of

specifying such area as part of the critical habitat."

But here's the critical clause. "Unless he determines, based on the best scientific and commercial data available that the failure to designate such area as critical habitat will result in the extinction of the species." If we are going to say, Mr. Chairman, that in every instance, with regard to listing, no other factors but scientific are to be considered when making the determination to list a species as threatened or endangered, and if in determining critical habitat, you cannot consider any other factors if considering them would lead to the extinction of the species, then we have an act

that is totally unbalanced.

Mr. Chairman, there is no way in this country to generate power that I know of that doesn't have some downside in terms of the environment. I would wager if we went totally to solar energy, we would eventually find some downside. I'm old enough to remember when President Eisenhower made his Atoms for Peace speech to the United Nations. Atomic energy was going to be our clean, renewable, permanent source of energy. We know now how it is considered.

But whether you dam a river, construct a turbine and a generator, whether you have a steam plant, a coal plant, oil-fired plant, natural gas, all of them have some effect. You transport oil, you pump and pipe gas, all of them have some danger and some downside. You weigh the risks, and you say, okay, for the sake of having electricity, for the ability to turn on the switch, for the ability to have air conditioning, we are willing to endure some degradation of the environment.

The question becomes this. When it comes to species, are we going to say, we will not take that risk? If there's any possibility that this species, whatever it is, may be endangered or threatened by some action we take and that action may lead to its extinction,

we will not even consider the action? That is not balanced.

Mr. Chairman, I'm not a biologist. But I'm willing to bet on every square mile of land in this country, there is something that is unique, some plant, some animal, some bug, some flower that is unique. An argument can be made that under the Endangered Species Act, we should not develop that square mile of land because of a particular species. If that's what we intend, then let's reauthorize the Act and say it up front, that is what we intend.

I would hope when we reauthorize this Act, and I hope we do reauthorize it sometime, that we rewrite it to say—and I'm going to say this very baldly: there are occasions when we will run the risk of the possibility of the extinction of the species, because we think that whatever other options we have are too damaging. I say, run

the risk.

I will close with the story of the Tellico Dam, and Senator Chafee is here, and he was around, not in Congress, but he was around and knows the issue. I remember very clearly, late sixties, maybe mid-sixties, we authorized the Tellico Dam in Tennessee. Of course, all dams have opponents. Maybe farmers are going to be flooded out, maybe Indian tribes, who knows. But there are always opponents to any dam.

Anyway, the dam gets authorized, and a little later, I think in the late sixties or early seventies, maybe 1970, 1971, the money gets appropriated and we start building it. Then in 1973, along comes the Endangered Species Act. Some wise fellow who didn't like the dam anyway thinks that if he can find some species that

the dam might threaten, why, he can then stop the dam.

And sure enough, it's the snail darter. The argument is that when this dam is finished, and the reservoir fills up behind it, it's going to kill the snail darter that exists at that moment in the little streams that flow into the creek that's going to be dammed.

The judge, in a Solomon-like decision, said it is not the construction of the dam that is the danger. The problem may arise when the dam is completed and the gate is dropped and the reservoir forms behind the dam. So the judge would keep jurisdiction of the case, but he didn't enjoin the construction. A couple of years then pass.

Now the dam is completed except for the gate being dropped. Plaintiffs come again and say, "Now, your Honor, they're going to drop the gate; the reservoir is going to fill up and the snail darter is going to disappear." The judge says, "You're right. I hold for the

plaintiffs."

So the issue now comes to Congress. This is when we created the so-called God squad, the Endangered Species Committee, and we gave it a charge, both on the Tellico Dam and Gray Rocks in Wyoming, we gave it 90 days to report back to Congress. We said, you are to make a report within 90 days as to this issue of the snail darter versus the dam, and if you have not reported in 90 days, we're going to drop the gate. That's a sunset.

On the 90th day, it reported; on a four to three vote, it came down on the side of the darter. Now it's back in Congress' lap. Congress in essence just says, to heck with it. We spent \$300 million or \$400 million on this dam, we don't really care about this little

fish, we're going to drop the gate.

We voted to drop the gate, fill up the reservoir, run the risk that the darter disappears. Ironically, one of the people that voted to drop the gate was then-Congressman Al Gore. The dam was in his State. It was his people, his jobs and he voted to drop the gate.

We dropped the gate. The reservoir fills up. Now, what is the outcome of all this? Here my friend and source, Lynne Corn, a most knowledgeable researcher at the Library of Congress, in response to my asking her what happened to the snail darter, says, "Well, it's amazing. The little critter now exists in all the streams that flow into the reservoir." The science was wrong. We didn't get rid of the snail darter and we have the dam.

This is not an excuse for ignoring science. But it is a plea for balance.

So Mr. Chairman, I would hope we would consider reauthorizing the Endangered Species Act. I would hope you would amend it in such a way to give it the balance I'm talking about, and if it doesn't happen to come out of committee that way, I'm prepared to offer those amendments on the floor.

I have discovered that people around the country are now realizing that the Endangered Species Act does not apply just to the forests of Oregon and Idaho and Washington. It applies to private lands. It applies to private riparian owners along streams where actions are being taken. It's having a dramatic effect on land utilization in this country, east and west, public and private.

I would, Mr. Chairman, renew my request that you hold a field hearing in the State of Oregon, because I think we have probably been harder hit by the effect of the Endangered Species Act than any other single State, and I can assure you of a friendly, certainly warm, but friendly reception if you would be willing to come out.

And I thank the Chair very much.

Senator GRAHAM. Senator, I appreciate your very thoughtful statement based on long experience. I also thank you for your invitation. We've received an invitation from Senator Kempthorne to hold a hearing in his State, and possibly at that time we could also move across the border and incorporate a hearing in Oregon.

Senator Packwood. Thank you. We've love to have you, and I ap-

preciate your putting me on so soon. Senator GRAHAM. Thank you very much.

For my colleagues, Senator Packwood had an urgent meeting, so I deferred opening statements until we could hear from Senator Packwood. We also are joined by Senator Murray. If it would be acceptable to the committee, I would suggest that we also afford her the courtesy of making her presentation at this time, then we would have our opening statements.

Senator Murray?

### STATEMENT OF HON. PATTY MURRAY, U.S. SENATOR FROM THE STATE OF WASHINGTON

Senator MURRAY. Thank you, Mr. Chairman, I appreciate that, and all the members of the committee.

I especially appreciate the opportunity to testify before you today on the Endangered Species Act. You know that this issue is of national importance, and I'm really pleased that this committee is

taking the time to examine this Act.

I feel especially qualified to comment on this issue. If there's one State that has experienced the highs and lows of the ESA more than other, it's my home State of Washington. People live in Washington State because it is special. It's blessed with incredible natural beauty and it provides a unique quality of life for all of its citi-

Since enactment of the ESA 20 years ago, to its saving of the bald eagle, to its role in the spotted owl debate, to the endangered salmon crisis today, it has always been a part of the Washington State policy landscape. I don't have to remind this committee that the two great Senators from my State, Warren Magnuson and

Scoop Jackson, were strong proponents of this Act.

Mr. Chairman, I want to get right to the point. The ESA has come in for some very harsh criticism lately. You can look at the heart of almost any natural resource conflict and you find ESA. This is particularly true in my State. There are critics on the right who appear to be interested in repealing the ESA or gutting its essential principles and there are others on the left who don't want it touched at all.

Let me be very clear. Neither extreme is going to solve the problem. The problem that we are facing is balancing competing values. The fundamental premise of ESA remains valid, that by taking care of our ecosystems we are ultimately taking care of ourselves. I truly believe that each generation must leave the environment in

no worse condition for the next generation.

We also have economic development values that are fundamental to a democratic, free market society. Sometimes these two sets of values come into conflict. Some have suggested that when such conflicts occur, the ESA is at fault and therefore it must give way. We shouldn't be so quick to generalize. There are three examples

in my region that belie the idea that the ESA is the sole source of natural resource conflicts.

First and foremost is the obvious Pacific salmon crisis. There are at least four major legal obligations that drive the salmon recovery in addition to the ESA. There's the Northwest Power Planning and Conservation Act, the Magnuson Fisheries Conservation and Management Act, the U.S.-Canada Treaty and U.S. treaty obligations under the Bolt decision.

The Northwest Power Act requires the Power Planning Council to ensure the successful migration, survival and propagation of anadromous fish. The Magnuson Fisheries Conservation and Management Act requires action to conserve and manage the anadromous fish species of the United States. The U.S.-Canada Treaty allows each country to receive benefit equivalent to the production of salmon originating in its waters.

And finally, in the Bolt decision, considering U.S. v. Washington in 1974, Judge Bolt ruled that because the right of each treaty tribe to take anadromous fish arises from a treaty with the United States, that right is preserved and protected under the supreme

law of the land.

Regarding salmon, we could do away with ESA altogether and still have a crisis on our hands. These other laws and treaties would still stand. But more importantly, we would have a legal,

moral and economic obligation to solve the problem.

Another recent example is a Ninth Circuit court decision regarding the management of the Snake River Basin National Forest. Basically, the court enjoined two forest plans because no consultation had taken place between the Forest Service and the NMFS on ESA listed salmon. This is a perfect example of a problem that didn't have to happen. The agencies only had to talk.

Since the injunction, officials of both agencies have agreed that consultations can be completed by February 1995. If they had made this agreement at the outset, the litigation would never have hap-

pened.

The last example is familiar, the spotted owl. Much was made of the owl's listing under ESA. But few people remember, the court injunctions against logging were the result of NEPA and National Forest Management Act violations. ESA only came into play well after the fact.

Until now, ESA has functioned as a fire alarm, going off when species are on the brink of extinction. Inevitably, this is a result of mismanagement, lack of coordination or litigation. It creates confusion, controversy and acrimony. In short, it creates a train wreck. Clearly, this is a problem. It affects the lives and livelihoods of many Washingtonians. Clearly, we must find a way to make this law work better for people. I believe a little preventive medicine would make ESA work much better than driving an ambulance to the crash site every time.

I've spent my whole life dealing with kids, and believe me when I tell you that everybody wins when a child gets prenatal care, preventive health care and head start. I think the same would be true

of ESA.

If the agencies worked together ahead of the curve, sharing information and recognizing their mutual interests, I believe we can

achieve the goals of ESA without creating economic chaos. For example, the solution to our salmon crisis is a comprehensive, coordinated plan that looks ahead to each phase of the salmon life cycle, from the mountain headwaters to the ocean, NMFS, the Forest Service, the Bureau, the Corps and the Power Planning Council have to work together to solve the puzzle.

Recovery steps taken in the national forests will be wasted if concurrent steps are not taken downstream. The action announced by the Clinton Administration yesterday is a solid step in the right direction. At the very least, it is an acknowledgement that we can and must make this law work better for average people. At most, it will be an innovation in the way Government does business.

These agencies have my support, and I hope they can make it work. Beyond that, I am prepared to support a moderate, thoughtful approach to ESA reauthorization that balances these competing concerns and enables the agencies of Government to work better for people in this country. The Chairman and the ranking member of this committee have introduced a bill that moves in that direction, and I've been happy to co-sponsor that bill. With this committee's leadership, I believe that we can preserve the integrity of ESA while making it a better law.

Thank you very much for giving me the time to testify today.

Senator GRAHAM. Thank you very much, Senator. Do you have time for some questions?

Senator MURRAY. I would be happy to.

Senator Graham. If I could ask this question, you mentioned that the challenge of the Act is to create a means of resolving competing, sometimes conflicting values. Do you think there is a difference in how that balance should be arrived at when you are dealing with private lands as opposed to public lands?

I might say, this is the second hearing that this subcommittee has had on this subject, the first focusing on private land issues, today we're going to be talking about public land. Is that a demarcation that has significance in terms of how that balance should be

struck?

Senator MURRAY. Well, I'm really glad that the committee is looking at that question. It becomes very difficult when you tell somebody who owns private lands what they must do. Again I go back to my point that we all have to work together beforehand, before the ESA becomes the alarm bell that goes off. Certainly what happens on private lands affects what happens in public lands. In my own State, they're adjacent all over, and many times in crisscross fashion.

But if we do a good job of managing our public lands in the State of Washington, the private lands won't have to take up so much of the slack. So I think it's imperative that we set a good example, as the Federal Government, in dealing with these crises on our own lands, and then work with private landowners to assure that the impact isn't so heavy on them.

Senator GRAHAM. Any questions, Senator Chafee? Senator CHAFEE. Thank you, Mr. Chairman.

I thought Senator Murray made a good statement. We will bear in mind her suggestion that we try to anticipate these things through cooperation amongst the various agencies so that we're not

responding to a crash site all the time.

I might say that one word, Mr. Chairman, we're going to hear a lot of all through this is the word balance. I'm always skittish about balance. Balance obviously is in the eye of the beholder, what is balance. I suspect that, I don't only expect, I know, that each

person sees balance in a different way.

Mr. Chairman, I have been an enthusiastic supporter of the Endangered Species Act. I was not here when it was enacted. I was here during the Tellico Dam situation that Senator Packwood was referring to. I've heard it said by the Senators, when that dam was nearly built, that if they had it to start all over again, they never would have built it, not because of the endangered species or the snail darter, but just because it didn't serve the purpose and the thing had gotten out of control. The Senator who then was our leader, Senator Baker was deeply involved with all that.

But anyway, I think Senator Murray has given us a good statement, and something that behooves us to pay attention to, and as we go through these very, very difficult deliberations. Thank you.

Senator GRAHAM. Senator Kempthorne?

Senator KEMPTHORNE. Mr. Chairman, thank you very much. I appreciate the balanced statement of Senator Chafee on this issue.

And Senator Murray, too, I thought that you made some very valid points. Being a neighboring Senator, let me ask you this. There's a Dr. Vic Kazinski who is a fish biologist, and perhaps you're familiar with him also. But he talked about the effect of wildfires on the Endangered Species Act.

If I may quote him, he says:

In a wildfire, we have the destruction of the vegetation cover and the root systems, which leads to increased erosions and slope failure rates. The wildfire can also destroy the upper organic soil horizon, which impacts the infiltration and the storage functions. It increases real surface erosion and surface runoff that may decrease the summer flow, because of loss of water storage function in the soil mantle. Loss of summer flow increase stream temperatures.

Then he went on to describe the effect of each of these on fish spawning and rearing, including, and I quote: "This wildfire effect struck me as the single most important impacting forest factor available to affect these endangered fish species." So we talk about the fact that we are working to save the endangered species wherever they may exist.

Wildfire may be a contributing factor to the destruction of an endangered species, and yet the Endangered Species Act in different situations has caused us to delay, if not halt, some of the timber harvest, the thinning operations, even going in and salvaging some

of the wood from forest fires that have already taken place.

If in fact there is science that would demonstrate that wildfires have a dramatic negative impact on endangered species, would you be supportive of efforts that would help us to find solutions so that we can get on with some of the prescribed harvest and some of the salvage sales of timber that has already been killed by the fires?

Senator MURRAY. Well, let me first say that I think it's very dangerous to pinpoint one factor in any major crisis as causing that crisis, and certainly in the Pacific Northwest, where we've had a number of wildfires, there's been a lot that has contributed to that, including the tremendous drought, dry season for the past 7 years, and a lot of other factors. In terms of salvage, we are working with the Administration, a number of us have written letters already asking them to do as much as they can, and they are moving very quickly on this.

I was just up in some of our fire regions a week ago, and people do have some concerns. I think the Forest Service is working very hard to assure that we don't have the floods that people are very concerned about, and going in and getting the salvage done. I think

that we can do that without undermining current laws.

I think it would be a mistake to say that the ESA has caused wildfires, or that the ESA keeps us from salvaging timber in order to keep floods from occurring in the future. What we need to do is say, how do we coordinate all the agencies to get in there and do what needs to be done to prevent crisis in the future. I think that

none of us have any perfect solutions.

Certainly when Mount St. Helens blew up in my State, there were species that were eradicated. But we as human beings can't stop some of those. But in terms of other things that we do as human beings, we can work to see that we provide a good, strong environment for the generations that come behind us. I would be happy to work with you, frankly, on some of the issues, including salvage. I know that's critical to our region.

Senator KEMPTHORNE. Yes, I appreciate that. I agree with you that to draw a conclusion that the Endangered Species Act is the sole contributing factor to the wildfires and therefore, that it's endangering the endangered species, would be an extreme position. I do think it's a factor. Recently in Idaho, Senator Daschle was in Idaho where he held a forest health hearing. This aspect was dis-

cussed.

So I think that again, it is this ecosystem management that hopefully we can get to. Because I think too often now we're dealing with it on a case by case, species by species instance, instead of the total picture, which is what I think all of us are suggesting we need to move toward. Thank you.

Senator Graham. Senator Murray, I want to thank you again for your excellent statement. We look forward to working with you and other Senators who bring the kind of background and experience from your States to bear in making this Act achieve the purposes

that you have so eloquently outlined.

Senator MURRAY. Well, thank you, Mr. Chairman.

### OPENING STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

Senator Graham. Thank you very much.

Senators as I indicated, opening statements were deferred in order to hear from our two colleagues. I have an opening statement which I will ask to be placed in the record, so that we can move on to our next panel of witnesses.

[Senator Graham's statement follows:]

STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

The Subcommittee convenes today for the third in a series of hearings oil reauthorization of the Endangered Species Act This will be our final hearing before adjournment However; I anticipate that the Subcommittee will hold one or more hearings, including field hearings, before presenting legislation to the full committee next year.

At our last hearing, we focused on conservation on private lands. We learned that conservation efforts on private lands can present significant economic burdens upon

property owners

One means of easing or avoiding some of these problems is to do a better job of protection and recovery on our public lands. While public lands cannot be the exclusive refuge for listed species, certainly the public has the right to expect that the government will protect species on public lands at least as well as it expects citizens to protect species on theirs. Furthermore, public lands often provide the best habitat in a given ecosystem.

Therefore, today we turn our focus to conservation on public lands and the respon-

sibilities of various Federal agencies under the Endangered Species Act.

The Federal Government owns approximately 30 percent of the nations total surface area or about 650 million acres. Nearly 9 percent of these Federal lands are managed by four Federal agencies: the National Park Service, the Bureau of Land Management, and the Fish and Wildlife service, which are within the Department of the Interior, and the Forest Service within the Department of Agriculture).

But these are not the only Federal agencies with responsibilities under the Endangered Species Act. The Act directs all Federal agencies to carry out programs to conserve threatened and endangered species. We want to explore how successfully

Federal agencies are carrying out that mandate.

I am pleased to learn that the Federal Interagency ESA Working Group has recently developed a Memorandum of Understanding signed by many Federal agencies. This memorandum is designed to facilitate cooperation among the Federal agencies in the implementation of the Endangered Species Act.

The Administration is to be commended for this effort and we look forward to

learning more about it and its implications.

We will also explore issues discussed in a recent report of the General Accounting Office on ecosystem management:

· How do Federal Agencies coordinate their responsibilities under this Act?

• How do Federal agencies reconcile those responsibilities with their own mission and with requirements placed upon them by other laws they are charged to administer?

• How can Federal agencies coordinate their data so as to support an eco-

system approach to the conservation and recovery of listed species?

One troubling lesson revealed in the GAO report is that conservation interests on Federal lands often collide with some economic uses of those lands, such as timber harvesting, grazing, or recreation. This can be particularly troublesome for agencies with budgets derived in part from those economic activities.

Worse still, is the fact that, too often, these collisions are not addressed proactively by the responsible Federal agency, but result from a court order directing the agency to fulfill its responsibilities. The GAO report notes that judicial and administrative challenges to agency action and inaction "have frequently resulted in delayed, altered, withdrawn and stalemated decisions.

These circumstances erode public support for the Endangered Species Act and

thus threaten the very species and habitat the Act is designed to protect.

Moreover, these court orders come at a time when the need for protection of a threatened or endangered species has reached the critical stage. There is general agreement that this emergency room approach is seriously flawed and that we must take preventive actions through better coordination and planning and through management of our resources, including Federal lands, on an ecosystem approach.

Perhaps the Memorandum of Understanding is an important step in that direc-

tion.

This Spring I visited the Pacific Northwest. As do the Florida Everglades, with which I am more familiar, the Pacific Northwest provides us with an extraordinary opportunity to look at these issues on an ecosystem basis.

I took forward to exploring some those issues, including the relationship of this act to other Federal laws. For example, one of our witnesses today suggests that the need for involvement of the Endangered Species Act could be reduced through

more complete compliance with other environmental laws, such as the National Forest Management Act and the National Environmental Policy Act.

Before we begin our discussion with our Federal agencies and with various interest groups with experience with conservation on public lands, we are pleased to have with us Senator Bob Packwood for a brief statement concerning issues of importance to his State and this reauthorization effort.

Senator GRAHAM. As I indicated, today's subcommittee hearing is the third in a series on the Endangered Species Act. Our previous hearing was on the application of the Act on private lands. Today it is going to focus on its application on public lands. This is an especially important aspect of the legislation in context that the Federal Government owns approximately 30 percent of the Nation's total surface area, or approximately 650 million acres.

We are going to be exploring a number of issues in today's hearing, including how do Federal agencies coordinate their responsibilities under the Endangered Species Act, how do Federal agencies reconcile those responsibilities with their own mission and with requirements placed upon them by other laws which they have the responsibility to administer, and how can Federal agencies coordinate their data so as to support an ecosystem approach to the con-

servation and recovery of listed species.

Last spring, I had the opportunity to visit the Pacific Northwest. As we do in many areas of my own State of Florida, with which I am more familiar, the Pacific Northwest provides us with an extraordinary opportunity to look at these issues on an ecosystem basis. I am pleased that our first two witnesses today brought us the perspective of their States and that I know Senator Kempthorne will be adding the perspective of the State of Idaho in his questions and comments throughout the day.

I look forward to exploring these issues. We will begin our discussion today with an exploration from various representatives of Federal agencies which have responsibility for the Endangered Species Act and other acts which interrelate with the Endangered Species Act. Before proceeding to panel two, I would like to call upon the ranking member of the committee, Senator Chafee, for

any opening comments he would like to make.

# OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator Chafee. Well, thank you very much, Mr. Chairman. I know we've got a big list of witnesses. Typical of this situation, I have two other committee meetings at the same time in addition

to this one, so I will be darting in and out, regrettably.

The only point I'd make in my statement, which I'll ask to be put in the record, sort of follows up on what Senator Murray was saying, and that is, I would hope that from all of this that our Federal agencies could be proactive in looking for ways to better conserve species, instead of waiting until the trouble arises. I hope we can get some testimony from Dr. Davis and others on that subject.

I would ask that my statement go in the record. Thank you, Mr.

Chairman.

[Senator Chafee's statement follows:]

STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

This hearing will examine the critical role numerous Federal agencies play in the conservation of endangered and threatened species. This role goes well beyond implementation of the Act by the Fish and Wildlife Service and National Marine Species Service. Habitat for at least 50 percent of all federally listed species is either partly or totally located on Federal lands. This makes the Federal Government a primary steward of our nation's fish and wildlife resources. The land management agencies, all of whom have representatives here today, play a critical role in determining to what extent these resources are managed and conserved in a sustainable way.

Endangered and threatened species are also dependent upon the availability of water and other natural resources regulated by the Environmental Protection Agency, the Army Corps of Engineers and other agencies. One recent study estimated that 29–33 percent of all listed species are affected by Federal water developments and diversions. Many of the endangered and threatened fish species affected were once important sport and commercial economic resources. Closely coordinated Fed-

eral actions are needed if these species are to have a chance of recovering.

Just as important as the role individual agencies play, is the need for increased cooperation and coordination among the various agencies with responsibilities under the Act. As efforts to conserve species grow more complex and involve larger areas—such as the effort to conserve the salmon and spotted owls in the Northwest—the greater the need for this cooperation. I applaud Secretary Babbitt and the Administration for their significant efforts in this regard. Interagency cooperation has greatly improved. Yet, I remain concerned that coordination problems—especially regarding the consultation process—continue to result in delays and uncertainty regarding activities subject to review under the Act.

I also remain concerned that Federal agencies are not complying with section 7(a)(1) of the Act. Each agency is required to take affirmative actions to conserve listed species. But, instead of being pro-active, they are waiting to act until one of their activities threatens a species. Federal agencies should be pro-active in looking for ways to better conserve species. That is the law and it is also the best way to avoid or minimize conflicts under the Act. Affirmative conservation steps, especially if coordinated among Federal agencies, could improve the prospects for recovery of endangered species and reduce the burden on private lands for conserving species.

Federal agencies, by working together pooling their expertise and resources have a great opportunity to make significant strides in providing for the conservation of listed species. Although this is a tall order, I look forward to hearing from the individual agencies and Deputy Assistant Secretary Bob Davison—the spokesman for the ESA inter-agency task force—about their efforts to make the Act work better. We all have a stake in conserving this nation's fish and wildlife resources for future generations.

Senator Graham. Senator Kempthorne?

## OPENING STATEMENT OF HON. DIRK KEMPTHORNE, U.S. SENATOR FROM THE STATE OF IDAHO

Senator KEMPTHORNE. Mr. Chairman, thank you very much.

I, too, would ask that my opening statement be made a part of the record. I'd like to thank you for continuing to hold these hearings. They're absolutely critical, and I would hope that in the next session of Congress we will have a bill that will go to the floor of both houses so it can be voted on so to enable us to bring about the modifications that I believe need to be made.

I look forward to the testimony of the panel that you have assembled. I have met with a number of Federal agencies, and I will tell you that it is my conclusion that we have a number of dedicated professionals that are working to try to help endangered species,

and yet they have told me on different occasions that the current Act, as written and as interpreted, is not the way to go about this.

They are frustrated also.

In one setting, where I had a number of different Federal agencies all sitting around a common table, and I asked them for example on the section 7 consultation process for the salmon recovery which of you is the lead agency, I received a different answer from each of those different Federal agencies. So there is need for greater coordination and direction on this.

I have shown at one of the previous hearings examples in my State of Idaho of counties that have a variety of listed endangered species. And, if you take one at a time, you could say this is man-

ageable.

But as I demonstrated, you begin to overlay one on top of the other of these different endangered species, each one being managed singly, so that you absolutely in many cases are creating an adverse effect upon another endangered species, let alone the human species that reside in the county that are trying to derive their economic income and well-being so that they can educate their kids and provide the basics.

I would remind us all that it is communities and counties like that that ultimately provide the funds to pay for the people that are then trying to bring about the recovery of these endangered species. You have the Ninth Circuit decision, which in those forest areas is halting all activity. I'm afraid that that may begin to set a precedent and the jobs that then are put on hold. But unfortu-

nately, the needs of those families cannot be put on hold.

So, Mr. Chairman, this is critically important. I look forward to the testimony of those that will be discussing this with us today. We need to find a solution to this so that we can bring about the needed modifications to the Endangered Species Act.

Thank you, Mr. Chairman.

[Senator Kempthorne's statement follows:]

STATEMENT OF HON. DIRK KEMPTHORNE, U.S. SENATOR FROM THE STATE OF IDAHO

Mr. Chairman, I commend you for holding this hearing before Congress adjourns sine die. The administration of the Endangered Species Act on public lands, particularly Federal lands in the West, is leading us towards a confrontation we in the Senate must act to avoid. Failure to act will not be good for Federal, State and local governmental relationships. It will not be good for the communities that must bear the economic and social impacts; and, more important—since we are talking about Endangered Species Act reauthorization here, it will not be good for the endangered species that we are trying to protect.

The section 7 consultation process in the Act, which was designed to ensure that Federal actions do not adversely affect endangered species, is broken. During one of my trips to Idaho, I had the heads of all the relevant Federal agencies in my office to discuss the long delays and other problems associated with the consultation process. During that meeting, no one could identify the lead agency where the buck

stops; in fact, I got three different answers.

It now takes months, or even years, to consult on individual activities within a national forest. It is not unusual for a single timber sale to go through several separate consultations between the time it is proposed and the time the timber is actually cut. This might be justifiable if the constant re-initiation of consultations resulted in increased protection for the protected species. But recent developments suggest that it, in fact, may be counterproductive.

The Endangered Species Act consultation process, coupled with an out-of-control timber sale appeals process, has become a roadblock to wise and prudent management of our national forests. The Forest Service was prevented from removing dry, dead wood from our diseased national forests in Idaho and other Western States, setting the stage for the catastrophic forest fires this summer. The result has been the destruction of important habitat, a loss of significant vegetative cover, an increase in stream temperatures, and likely increases in erosion. The last estimate that I was given several weeks ago on the cost for watershed and riparian restoration in the wake of the fires was \$25 million.

By the time an activity is permitted to go forward in a national forest, it has received extensive and sometimes repeated consultations. Now, we have a decision from the Ninth Circuit that, I believe, significantly alters the interpretation and application of the Endangered Species Act. Despite the fact that the Forest Service is engaged in a watershed analysis, which is being incorporated into the consultations to account for cumulative effects; and despite the fact that interim PACFISH guidelines will be finalized to amend the forest plans for protection of endangered salmon, the Ninth Circuit has ruled that all activities that may affect endangered salmon must be halted immediately. They cannot be resumed until consultation on existing forest plans are completed. It doesn't matter whether the activities are beneficial or adverse; it doesn't matter how much consultation that the individual activities have received or the degree to which their effects have been cumulatively evaluated: it doesn't even matter that the Forest Service is amending the forest plans through the proposed PACFISH guidelines. The court says unless and until consultation on the forest plans are completed, all existing activities must be stopped and no future activities can go forward.

I believe this is a wholly unworkable result. If the Ninth Circuit decision stands, every time a new species gets listed within the Ninth Circuit jurisdiction all activities get halted until existing forest plans are again reopened. Needless to say, this presents a very real and practical problem in Idaho and other Western States. Thousands of jobs, millions of dollars of investments, firefighters lives, and the very species we seek to protect are jeopardized.

Our staffs have had many discussions about this in the past two weeks, without resolution. The failure of this committee to respond to practical problems related to the ESA, even where there is agreement on policy makes ESA reauthorization more difficult and contentious in the long run. I would hope that this committee will work with me and other members of the Senate to avoid these problems between now and the time that the ESA is reauthorized.

I'm glad we have all the Forest Service, the Fish and Wildlife Service, and National Marine Fisheries Service here today. I'm also glad Pacific Rivers Council is here. They are the plaintiffs in the case upon which the Ninth Circuit ruled. But I am especially glad that two Idahoans are here to present their experience with the workings of the Endangered Species Act and the ESA consultation process. Mark Brinkmeyer is President of Riley Creek Lumber, and Jim Little is head of the Endangered Species Committee for the Cattlemen. Their practical experience ought to be instructive to this committee.

Senator GRAHAM. Thank you, Senator.

All of the statements which have been offered will be placed in the record.

I would like to ask the members of panel two to please come forward. I'm going to introduce panel members by name and title.

Dr. Bob Davison, Deputy Assistant Secretary for Fish and Wildlife and Parks, Department of the Interior; Dr. Nancy Foster, Deputy Assistant Administrator for Fisheries, National Marine Fisheries Service; Mr. Peter Walsh, Assistant Deputy Under Secretary of Defense for Environmental Quality, Office of the Deputy Under Secretary of Defense; Mr. David G. Unger, Associate Chief, Forest Services, U.S. Department of Agriculture; Mr. Daniel Beard, Principal Commissioner, Bureau of Reclamation, Department of the In-

terior; Mr. Dennis P. Fenn, Acting Associate Director, Natural Resources, National Park Services, Department of Interior; Dr. John Zirschky, Assistant Secretary of the Army for Civil Works; Ms. Denise Meridith, Deputy Director, Bureau of Land Management, Department of Interior; Ms. Dana Minerva, Counsel to the Administrator, Environmental Protection Agency.

We have a large number of witnesses on panel two. Our purpose was to be able to get the perspective of all the agencies that are involved underscoring the comments that have already been made about the necessity of effective interagency collaboration.

I would like to ask Dr. Davison if he could give us his remarks for up to 5 minutes, the other members of the panel for up to 3 minutes. Your full statements will appear in the record.

I would also ask my colleagues that we defer questions until we've heard from all the panelists, and then we can ask questions to whichever member of the panel we desire. If those ground rules are acceptable, Dr. Bob Davison.

Senator Chafee. Mr. Chairman, I want to say to you, you've set

a world's record. I think, for the size of the panel.

Senator Graham. Well, should we call Mr. Guinness?

Dr. Davison?

### STATEMENT OF BOB DAVISON, DEPUTY ASSISTANT SEC-RETARY FOR FISH AND WILDLIFE AND PARKS, DEPART-MENT OF THE INTERIOR

Dr. DAVISON. Thank you, Mr. Chairman.

This morning I will begin by describing a number of efforts by this Administration and by the agencies represented here today and others to make the Endangered Species Act work better. The Act establishes a strong leadership role for the Federal Government, and that role carries with it a heavy responsibility to the people of this country and to future generations to bring species back from the brink of extinction in a fair and effective manner.

This responsibility falls on all Federal agencies, and particularly on the Fish and Wildlife Services and the National Marine Fisheries Service, which have many specific delegated duties under the Act. On July 1st, in an effort to better meet their responsibilities, the two services put six new joint policies into effect. The policies that are now in effect first ensure that Endangered Species Act decisions are based on sound science by requiring use of independent,

scientific peer review.

Second, they require expedited completion of recovery plans and minimization of social and economic impacts that may result from implementation of the plans. The third policy, which becomes fully effective next month, will provide greater predictability for private landowners concerning any effects that the listing of species may have on proposed or ongoing activities. It will require the services to identify, to the extent possible, specific activities that are exempt or that will not be affected by the Act's prohibitions on the take of listed species.

Fourth, the policies seek to avoid crisis management by emphasizing cooperative approaches that focus on groups of species dependent on the same ecosystem. Finally, the policies put into effect in July ensure that State agencies are fully involved in Endangered

Species Act activities as required by section 6 of the Act.

The Administration has not stopped with those efforts. Last month, Secretary Babbitt and Commerce Under Secretary Baker announced a new policy of no surprises in habitat conservation planning under section 10 of the Endangered Species Act. This policy says that landowners who have endangered or threatened species habitat on their property and who agree to a habitat conservation plan will not be subject to later demands for a larger land or financial commitment if the plan is adhered to, even if the needs of the species increase over time, even if we were wrong. This policy gives more economic certainty to landowners who are trying to reconcile endangered species conservation with land use development. In short, it says a deal is a deal.

And as promised in June, the two services have continued to develop additional joint policy directives, requirements and guidance to improve their consistency, efficiency and effectiveness in carrying out the Act. These joint policies and guidance concern the definition of species, the conservation and monitoring of candidate species, the management of listing petitions, the controlled propagation of listed species, the management of inter-crosses or hybrids, and the standardization of policies and procedures for section 7 consultations and for section 10 conservation planning. Over the next month or two, the two services will make each of these joint draft documents available for public review and comment.

A final key element of the Administration's June initiative was the formation of a Federal interagency working group. The purpose of that working group is to identify, develop and implement reforms that streamline and improve the performance of the Endangered Species Act. Kate Kimball, the Deputy Assistant Secretary for Oceans and Atmosphere at Commerce and I serve as co-chairs

of that group.

The working group's efforts to date have resulted in the signing yesterday of an unprecedented Memorandum of Understanding in which 14 Federal agencies, including all those that are represented here today, have made commitments to endangered species conservation, and more importantly, established a framework to cooperate and participate in following through on those commitments.

As parties to the agreement, each agency will identify affirmative opportunities to conserve species listed under the Endangered Species Act and use its existing programs or authorities to carry out activities toward that end, including taking appropriate actions identified in recovery plans. Each agency will determine whether its respective planning processes effectively help conserve threatened and endangered species.

These common goals will be accomplished through participation in both national and regional interagency recovery teams and working groups. Equally as important, these national and regional groups will also identify and seek to resolve specific issues associated with interagency consultations under section 7 of the Endangered Species Act. All of this will be accomplished with the appropriate involvement of the public, States, tribal and local governments.

Finally, this week, Fish and Wildlife Services, National Marine Fisheries Service, Bureau of Land Management and the Forest Service have agreed to begin discussions on development of so-called counterpart regulations under section 7 of the Endangered Species Act. The current joint section 7 regulations of the two services allow for development of such counterpart regulations with the concurrence of those services.

This previously unused authority provides a means by which the Forest Service and the Bureau of Land Management can each integrated Endangered Species Act requirements with their own unique planning requirements under their own statutes. The re-

sults should be greater predictability and efficiency.

My full written statement describes the affirmative efforts by the Fish and Wildlife Service to conserve threatened and endangered species, and I won't take the time to discuss those. Those efforts include conservation measures on national wildlife refuges and activities by the fisheries, coastal ecosystems and private lands pro-

grams of the Fish and Wildlife Service.

I'd like to say briefly in conclusion that on June 15th, before this subcommittee, Secretary Babbitt noted that he operated on three principles. Use comprehensive, unimpeachable science, get involved early, and maintain an ecosystem focus. He also noted the critical importance to all of these of maintaining strong partnerships. I believe that you have heard in my testimony and that you will hear from others today that these principles are shared throughout the Administration.

Thank you.

Senator Graham. Thank you very much, Doctor. We appreciate your statement. As I indicated, your full statement will appear in the record, as will all others submitted.

I would ask that the other members of the panel attempt to limit their oral statement to 3 minutes, starting with Dr. Nancy Foster.

# STATEMENT OF NANCY FOSTER, DEPUTY ASSISTANT ADMINISTRATOR FOR FISHERIES, NATIONAL MARINE FISHERIES SERVICE

Dr. FOSTER. Thank you.

Good morning, Mr. Chairman and members of the subcommittee. I am representing the National Marine Fisheries Service, and really pleased to be able to be here today to talk about what we see as some of the successes that we've had in cooperating with other Federal agencies and carrying out our responsibilities under the Endangered Species Act. Maybe even more importantly, to talk about some of the opportunities we see in the future.

Under this law, the Fisheries Service is responsible for the protection of marine, estuarine and anadromous species. We have fewer species to worry about than our friends in the Fish and Wildlife Service, but more often than not, they wind up being equally difficult. We think that the Endangered Species Act is a critically important conservation law. We're well aware that it has its critics.

I think it's important, however, to point out that under the leadership of this Administration, we are all dramatically changing the way we implement this law. We're making changes, administrative changes, essentially changing the way we do business. By doing so,

we're becoming more responsive to the concerns of the public as

well as the needs of the species.

For example, we've been working very closely with the Fish and Wildlife Service, trying to ensure that our policies, our internal guidelines, and all of our procedures are consistent. Because consistency between these two agencies is essential for members of the public and for other Federal agencies who have to deal with us as we implement this law. In fact, we think that they have a right to expect such consistency and some measure of predictability.

We have also been trying to improve our cooperation and coordination among all Federal agencies that have major ESA responsibilities. Some examples which I will mention the work we've been doing with the Department of the Interior and the Corps of Engineers in our southeastern region on right whales and turtles; the work we've done on Pacific salmon; and in the Bay/Delta Eco-

system Partnership in California.

One example with regard to salmon, we think that we have had a very positive experience in our consultation on PACFISH, which is the interim strategy of the Forest Service and Bureau of Land Management to begin restoration of riparian areas and some aquatic salmon habitat. The Bay/Delta area is also significant, because it is an agreement of cooperation among four Federal agencies and the State of California, and it attempts to bring the ecosystem approach to resolving issues in the delta area, and to become more proactive and get ahead of the game to avoid listings.

So we're looking forward to even closer cooperation through this new MOA so that we can all be more efficient and more effective as we try to implement this law. Thank you, and I would be happy

to answer questions.

Senator GRAHAM. Thank you, Dr. Foster.

Mr. Peter Walsh?

### STATEMENT OF PETER WALSH, ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE FOR ENVIRONMENTAL QUALITY

Mr. WALSH. Good morning, Mr. Chairman.

In general, I can say that the mission at the Department of Defense is quite compatible with the Endangered Species Act objectives. That's not to say that in the early stages or in the early days we didn't have difficulties. We have examples of projects that were delayed, projects that had additional costs or some projects that were finished that could not be used as intended.

However, that's behind us now, and we have engaged in a very aggressive program to do fence to fence inventories of our bases, of the 25 million acres, to identify the habitats of endangered species, as well as to identify species themselves. That program is well un-

derway, almost 60 percent complete at this time.

In addition to that, we're also engaged in an effort, in conjunction with U.S. Fish and Wildlife, to develop integrated natural resource plans for those installations so we can better manage our species and our resources. Now, I don't want you to get the idea that there has been no impact upon the military itself. In fact, as you may understand, some of our maneuvering areas in the southeastern United States have been impacted because of the Red-cockaded woodpecker.

Our launch activities at Vandenberg Air Force Base have been impacted by the nesting season of the least tern. We cannot fully use Chocolate Mountain because of the desert tortoise, and of course, some of our overhead flights, particularly low flight routes,

had to be adjusted to accommodate the peregrine falcon.

But I can say in general that we've been able to accommodate those situations and still carry out the training mission of the military. I also would like to point out that the military has been not just avoiding impacts, but has actually been contributing to sustaining some of the populations and has been making great efforts in certain areas like Dare County, where we are reintroducing the red wolf. We've been working very aggressively ton restore the loggerhead shrike on San Clemente Islands.

And so we have got some very positive contributions. So the end result is, I think, that the military can work very well with the En-

dangered Species Act and contribute to its objectives.

Thank you.

Senator GRAHAM. Thank you very much, Mr. Walsh.

Mr. David Unger?

### STATEMENT OF DAVID G. UNGER, ASSOCIATE CHIEF, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE

Mr. UNGER. Thank you, Mr. Chairman, and members of the committee. I'd like to say the Forest Service is committed to manage the 191 million acre national forest system with an ecosystem perspective for all uses, while ensuring protection of the resource base, including threatened and endangered species. About one-third of all species currently listed under the Endangered Species Act are known to occur on the national forests and grasslands. So this is important to us.

We have worked in the past and been successful in protecting and improving habitat conditions for many T&E species throughout the U.S. With help from our agency, the bald eagle, the peregrine falcon, grizzly bear, eastern timber wolf, blackfooted ferret, Puerto Rican parrot and greenback cutthroat trout have been brought back from the brink of extinction and we've provided a more detailed statement on our work with these and other species in a sup-

plemental statement to our testimony.

We view implementation of the Endangered Species Act as a key component of our ecosystem management efforts, and we realize it's not a quick or simple or inexpensive process. In 1993, the Forest Service spent \$39 million on measures to protect 253 listed species and that included \$8.3 million supporting Forest Service research studies. The majority of all the T&E species expenditures were spent on 12 species, bald eagle, northern spotted owl, Redcockaded woodpecker, four Snake River salmon stocks, grizzly bear, gray wolf, peregrine falcon, Mexican spotted owl and marbled murrelet.

Now, early on, we embraced the notion that the best way to conserve threatened and endangered species is by implementing a protective strategy, and I was interested in Senator Murray's comments on that this morning, that through protection and habitat conservation we can prevent the need for listing. In 1980, to formalize this approach, we created a sensitive species program where

we identify species of concern and try to implement habitat conservation strategies before their survival is clearly at risk. So far, we've designated about 2,300 species of plants and animals that

are sensitive and deserving that attention.

In the past year, we've worked with four other Federal agencies, including the two ESA regulatory agencies to further this prevention strategy, and it provides in a Memorandum of Understanding a framework for development of conservation assessments, strategies and agreements. We have underway some 30 to 35 projects which are projected for completion in 1994. We feel that's a very

important preventive strategy.

Of course, we're implementing larger scale planning efforts these days as a result of threatened, endangered and sensitive species issues, including the President's plan for the Northwest, and the PACFISH strategy, which has been referred to this morning. We also need to find ways to deal with the complexities of coordination between the provisions of ESA and other laws which govern our work, such as the National Environmental Policy Act and the National Forest Management Act.

We are very pleased to join in this Memorandum of Understanding that Dr. Davis reported on, which we think will help establish

a framework for further coordination in that regard.

In summary, I'd like to say, we will continue to work with our partners in the conservation of species, habitats and ecosystems for the recovery of threatened or endangered species. We believe the Act is a necessary and important tool in our continuing efforts to manage the national forests and grasslands.

Senator GRAHAM. Thank you very much, Mr. Unger.

Mr. Daniel Beard?

### STATEMENT OF DANIEL P. BEARD, PRINCIPAL COMMISSIONER, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

Mr. BEARD. Yes, sir, thank you, Mr. Chairman.

My statement, which has been made part of the record, outlines three different approaches that we've used to address endangered species problems. I thought I'd like to take a few moments to sum-

marize the highlights of those.

The first approach that we have used was mentioned by Dr. Foster, and that is with respect to some particularly difficult water resource problems in the San Francisco Bay and delta area in California. The four Federal agencies involved have very disparate functions and activities, especially in the area of water quality standards formulation and implementation, water project operations and the search for long-term solutions, as well as Endangered Species Act responsibilities.

We put together at the regional level, with our regional executives, an organization entitled Club FED, which stands for Federal Ecosystem Directorate. The purpose of Club FED is to get the Federal house in order, so to speak, and to ensure that the various activities being undertaken by the Federal agencies are done in a coordinated manner. For example, announcements are made at the same time, and we share information about announcements so that

we can learn from one another.

This has been a very effective process. It has helped us avoid a number of problems, and it has also enabled us to reach out to the State and to begin to include State agencies as well as other non-Governmental agencies and groups as we search for solutions to all of these problems. It has been a unique experience, at least from our perspective. But it has been one that's been very effective and

very successful.

The second approach we've used is what I would refer to as a more traditional approach, and that's the approach described for the Pacific Northwest and the salmon issues there. There, we have played a key role in assisting States, Federal agencies, tribal agencies, and regional agencies, to secure flows necessary for salmon recovery. We have used a variety of agreements and arrangements to improve information and the flow of information among agencies and to promote actions that avoid jeopardy to salmon. We have done so without the creation or establishment of any super agencies or entities, but instead have used the more traditional interagency approaches.

The third example that is cited in my testimony is a unique approach we've used in the Upper Colorado River Basin. This is unique because in 1988, Federal, State and local agencies, as well as non-Governmental organizations, recognized that significant problems were going to be coming. They sat down and all of these entities together developed a recovery program for certain fish species. That recovery program has enabled many water resource activities to continue to take place as we have laid out a solution to

the problem and are working towards solving that problem.

We have also been able to continue with many of our water resource activities in that area. So it is also an approach that has been funded not only by the Federal Government, but also by State governments as well as local entities. It is a comprehensive and very successful approach. It involves and combines those priorities that the Secretary has laid out. Of course, these are good science and to be involved early and to take an ecosystem approach.

That concludes my remarks, Mr. Chairman. Senator GRAHAM. Thank you, Mr. Beard.

Mr. Dennis Fenn?

## STATEMENT OF DENNIS P. FENN, ACTING ASSOCIATE DIRECTOR, NATURAL RESOURCES, NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR

Mr. FENN. Thank you, Mr. Chairman, and members of the panel. I appreciate the opportunity to appear before the subcommittee today to testify on protection of endangered species on lands and

waters within the National Park system.

The Park Service recognizes that endangered species are an important part of our responsibility and that interagency collaboration is essential to endangered species conservation. We work closely with other agencies involved in sustaining environmental quality, especially our sister agency, the Fish and Wildlife Service. We routinely consult and cooperate on all matters which may affect federally listed species within the national parks.

Mr. Chairman, I'd like to make the core of my remarks this morning a brief discussion of two geographic areas, the Greater

Yellowstone ecosystem and South Florida as examples of where we are already working closely with our sister agencies to restore threatened and endangered species within large ecosystems. My first example is the wolf reintroduction into the Greater Yellowstone ecosystem. The National Park Service, the U.S. Fish and Wildlife Service and the U.S. Forest Service are working closely together to restore gray wolves in the Yellowstone National Park and the Greater Yellowstone area.

The final environmental impact statement was completed earlier this year. The record, the decision was signed in June, and we hope that the first group of wolves will be released into Yellowstone National Park this fall or winter. Wolves were once an integral part of the Yellowstone ecosystem and their restoration will help restore the natural operation and balance of the Greater Yellowstone sys-

tem.

I was in a science conference earlier this week where it was stated that Yellowstone National Park may be one of the few places left in the United States where all but one of the natural native fauna found prior to the arrival of European man still exists in that place. The only one missing is the wolf, and we hope that that

soon will be returned through this interagency effort.

The second example is the South Florida ecosystem. We've all heard, and I think it's a statement of fact, that it's probably the most severely threatened major ecosystem in the country in South Florida. The National Park Service administers four units in South Florida, Everglades, Bit Cypress, Biscayne and Dry Tortugas. These are nested within an interrelated system that stretches from the headwaters of the Kissimmee River near Orlando down to the tip of the Florida Keys and Dry Tortugas.

There are 56 federally listed species and 29 candidate species within this entire South Florida ecosystem. Everglades National Park alone has 14 federally listed endangered species. This large number and wide distribution of listed and candidate species is a clear indication that problems exist, both serious and systemic

problems in the South Florida ecosystem.

In recent years, significant restoration activities have been undertaken at all levels of Government to halt this deterioration and begin the process of both Everglades National Park and South Florida ecosystem recovery. We're learning that these systems are very complex. Senator Kempthorne earlier in his remarks talked about how sometimes in the overlaying of these endangered species you run into conflict.

And at least one good example in South Florida is the snail kite. It's moved into man-altered habitats and dryer portions of the Everglades, and now we propose to restore some of those natural water flows. We're potentially threatening that species with no longer being able to exist in areas where it's moved into. So we've got an example in trying to solve one problem, we perhaps face another.

Research has shown, fortunately, that the snail kite readily relocates to and can successfully breed and nest in areas where water conditions are favorable. So it is going to be possible to design plans where we can protect that species while restoring the larger ecosystem of the Everglades.

In December of 1992, the Fish and Wildlife Service and the Park Service proposed to undertake a comprehensive multispecies planning effort for federally listed species in South Florida as opposed to single species planning. In September of 1993, the Federal task force on South Florida ecosystem restoration endorsed this concept and made it one of the several initial priorities for the coordinated ecosystem management effort in South Florida.

The National Park Service strongly supports cooperative actions to recover listed species through managing ecosystems as is being done in South Florida. We view such management to be part of our

mission as a partner in sustaining large natural systems.

Thank you very much, Mr. Chairman.

Senator GRAHAM. Thank you very much, Mr. Fenn.

Dr. John Zirschky?

#### STATEMENT OF JOHN ZIRSCHKY, ACTING ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

Dr. ZIRSCHKY. Yes, sir, thank you. I'm here on behalf of the Secretary of the Army, who implements and has the authority for the Army Civil Works program. That program is responsible for about 12,000 miles of inland waterways, 8,500 miles of flood control levees, and 383 reservoirs. We are responsible for an area of approximately the size of Vermont and

New Hampshire combined.

Let me briefly talk about a few activities across the country where we're involved with the Endangered Species Act. The first would be the Pacific salmon issue in the Northwest. Many different interests are affected by the activities in the Pacific Northwest. Nevertheless, we recognize that we are responsible for the hydroelectric power development, most of the dams in that region, and are working actively with the Commerce Department to operate

our dams in a more fish-friendly manner.

The second activity involves protecting turtles in the southeast part of the United States, where we're responsible for maintaining navigation channels. In 1990, the National Academy of Sciences estimated that dredging was killing approximately up to 500 loggerhead sea turtles and 50 Kemp's Ridley sea turtles annually. Our engineers have designed something that we believe will help reduce this mortality. It is essentially like a cattle catcher on an old train. We now put these deflectors on our dragheads for dredging, and they basically push the turtles out of the way as we dredge. In an initial test of that, in 115 dredgeloads, we've only caught one sea turtle. It was captured alive and is now recuperating in Sea World for subsequent release once we're sure it's all right.

A very controversial issue that we're working on is the Missouri River Master Water Control Manual in the midwestern part of the country. There are a number of endangered birds and fish in the Missouri River system. We're undertaking a comprehensive ecosystem review, in cooperation with Federal agencies, State governments, local citizens, to determine a new way to operate the Mis-

souri River system.

We've come up with a preferred alternative that we believe not only is good for the national economy, but also increases the chances of survival of these endangered species. We're currently in the process of conducting public hearings across the midwest, and yesterday decided to extend the comment period to March 1st of 1995 to ensure that the public had an opportunity to comment.

Earlier this year, we initiated an environmental task force to see how we can do a better job in our environmental responsibilities. One of the conclusions was, with respect to the Endangered Species Act, we're still reactive rather than proactive. We are going to be determining ways we can do a better job of protecting the natural resources on our lands so that hopefully, species within our jurisdiction will never become endangered or threatened. As we develop that, we'd be happy to brief you at any time.

Thank you.

Senator GRAHAM. Thank you very much.

Denise Meridith?

### STATEMENT OF DENISE MERIDITH, DEPUTY DIRECTOR, BUREAU OF LAND MANAGEMENT, DEPARTMENT OF THE INTERIOR

Ms. Meridith. Good morning. I'm very happy to be here today, representing the Bureau of Land Management in this very important discussion. It's important to us because as you know, BLM manages more land than any other Federal agency. We manage over 270 million acres, that's about an eighth of the United States. More importantly, the diversity of habitats on that land ranges from Arctic tundra to arid southwest deserts.

Over 215 federally listed plant and animal species occur on BLM managed lands, and over 900 candidate species occur there. Furthermore, this is going to be an issue of growing importance to us, because one half of the approximately 200 species that are pro-

posed to be listed by 1996 also occur on BLM lands.

As has been mentioned several times today, we simply don't have the resources to try to save one species at a time. We're working very closely with the other agencies here on the panel to help restore and maintain healthy ecosystems to the benefit of all affected species. In an ecosystem approach, BLM's goal is to apply common sense to common problems for the common good.

As was mentioned by several of the earlier witnesses, social and economic conditions have to be considered when you're dealing with the Endangered Species Act. BLM is very concerned about ensuring that people are an important part of the ecosystem. We're trying to help local communities to anticipate and adjust to changes

in economics through partnerships.

For the sake of saving time, I will highlight one project that we're working on, and that's Trout Creek Mountain in Oregon. What I like about this project is that it's a ground-roots effort. In Trout Creek, local ranchers Doc and Connie Hatfield organized some of their neighbors to start working together with the BLM and the Fish and Wildlife Service and the State and the conservation groups as far back as 1988 to try to solve the very real problems that were going on there due to grazing. A lot of the area was overgrazed; it was becoming unproductive for cattle as well as the cutthroat trout and other species in the area.

This group formed a committee and they've worked out self-imposed limitations on use of that land for cattle grazing. They re-

duced the seasons of use that they were using the land, and they also reduced the number of cattle on the land. The result has been beneficial to everyone. The BLM has finished a video, which I'd like to send over to the committee, where we interview local ranchers and local environmental groups and local industry people, and they all attest to how, in this case, the Endangered Species Act and livestock grazing have been able to function very well side by side. One of the ranchers has even mentioned that the cows are fatter now since they started to use this process.

So I think that's a very important lesson and that's really the way BLM wants to operate in this area. We also have a lot of other examples, which I'll address if people have questions about them. For Marys River Restoration Project in Nevada, we acquired about 47,000 acres and, working again with the State and local governments and the local ranchers in that area is going to benefit at

least 12 different candidate and listed endangered species.

In summary, the lands managed by BLM provide the last remaining suitable habitat for many imperiled species. Our efforts to conserve and restore ecosystem health will enable present and, as I always emphasize, future generations of Americans to enjoy the full measure of environmental, economic and aesthetic benefits that the public lands have to offer.

We have a longer statement that I would like to submit for the

record, and I thank you for listening.
Senator Graham. Thank you very much, Ms. Meridith.

Dana Minerva?

#### STATEMENT OF DANA MINERVA, COUNSEL TO THE ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

Ms. MINERVA. Mr. Chairman, and members of the committee,

thank you for asking me here today.

I am pleased to provide testimony on the Endangered Species Act, an environmental law which the EPA sees as extremely important, valuable in helping us further our overall environmental objectives. Although EPA is not a land management agency, resources protected by the EPA, such as wetlands, are of critical value to the recovery and survival of many endangered and threatened species.

EPA's authorities and responsibilities afford many opportunities for us to plan an active role in endangered species conservation and protection. My written testimony highlights examples of how EPA's programs have contributed to achieving ESA goals. These include the water quality program, Superfund program, Clean Air Act pro-

grams, and the pesticides programs, among others.

I think you've heard from many of the people testifying here today that there is within the Administration a new emphasis on ecosystem protection. That's an emphasis that Administrator Browner shares. Administrator Browner recently charged EPA with developing a place-based approach to ecosystem protection. This place-based approach seeks to integrate all of EPA's resource protection authorities with those of other Federal agencies within specific geographic areas. Certainly the San Francisco Bay/Delta program is one of those. This focuses on key environmental problems unique to these ecosystems.

Traditionally, EPA's programs have tended to focus on particular sources, particularly pollutants, particular water resource uses, rather than on integrated environmental management within discrete ecosystems. We now recognize that our efforts require a more strategic, holistic and integrated strategy. By looking at ecosystems as a whole, we can better address the threats to those systems and consequently protect the species that depend upon them.

I think that the MOA that the Federal agencies have signed re-

flects this ecosystem approach and we are proud signers of it.

In conclusion, I would say that the EPA views the ESA as complementary to the other environmental protection laws that EPA implements and that it forms a foundation with these laws to help protect endangered and threatened species. Thank you for allowing me to testify.

Senator GRAHAM. Thank you very much, Ms. Minerva.

The comment that was made by both of the Senators on panel one was the necessity of looking for a balance among competing, sometimes conflicting interests in the administration of the Endan-

gered Species Act.

I'd like the thoughts of any of you who would care to speak to it to the question of whether you believe that that point of balance is different when you're dealing with public lands than with private lands. If so, what would be some of the areas of difference, and finally, do you think the current law reflects that different treatment of balance on public as opposed to private land?

Dr. Davison?

Dr. DAVISON. I guess I'd say, I think the current law reflects a difference in balance, depending on whether there's a Federal action involved or federally undertaken or federally funded action, and that there is a difference in balancing point between those kinds of activities that involve the Federal Government and those that involve solely private activities.

I think that what we are trying to do, I think there is a, the desirable situation here is to have the Federal Government try to set a good example, as Senator Murray said, improve its coordination and its efforts to conserve species, and bear a heavier share of the burden, so that less of the burden does fall on private landowners.

And I think that's partly what the MOU that we signed yester-day does. To the extent that we can get Federal agencies resolving differences on consultation, moving forward on affirmative conservation efforts and working together in that regard, then the needs of the species are much more likely to be met on Federal lands and by Federal agencies and less burden falls to other non-Federal entities or individuals.

Senator Graham. To use a specific example, if a particular forestry practice was involved in the protection of an endangered species, would you suggest that a more protectionist set of practices would be appropriate for lands owned by the Department of Agriculture, administered by the Division of Forestry, as opposed to private lands, which were used for forestry purposes?

Dr. Davison. Well, again, under the Endangered Species Act, the provisions of section 7 and the requirement to avoid jeopardizing that the species exists and potentially critical habitat would apply to the Department of Agriculture in that situation, as well as an

affirmative duty to conserve those species under section 7 of the Act. So I think there is a heavier burden that falls there than on private landowners.

Senator GRAHAM. Any other comments on that question of where the balance is struck as between private lands and public lands?

Yes, Dr. Foster?

Dr. Foster. Yes, it would seem that also contributing to this would be the policy that was mentioned earlier, a deal is a deal, which, I think, illustrates that the Federal Government accepts more responsibility or has a stronger responsibility. Because that represents an attempt to again give some measure of predictability to the landowner so that they know exactly what's expected of them.

Senator GRAHAM. Any other comment on that question?

The Endangered Species Act also places an affirmative duty on Federal agencies to conduct their activities in such a way as to be protectionist of endangered species. Do you have any comments as to how effectively that mandate has functioned as it relates to the activities of your agency, and do you have any recommendations for modification in the law as to that responsibility?

Yes, Dr. Unger?

Mr. UNGER. I might comment on that from the standpoint of the Forest Service. We do recognize that affirmative responsibility through our research programs, where we are investigating threatened and endangered species, and the sensitive species program that I mentioned earlier where we try to identify a species that may be at risk in future, we try to take actions to prevent such circumstances.

The whole ecosystem management approach that we are taking in trying to be holistic and forward-looking at larger scales is another example of the way we are approaching that responsibility.

Senator GRAHAM. Any other comments?

Dr. ZIRSCHKY. Yes, Senator, we have been struggling with that issue and recently have been working on a performance plan on environmental stewardship to address, how we can do a better job. What we have developed are some performance measures that our project managers can use to make sure they are doing a good job. What we're now in the process of trying to do is develop means to validate those measures to make sure that we're actually helping the wildlife on our lands. We've submitted that proposal to OMB as a pilot project that we hope will be approved and implemented over the next few years.

Senator GRAHAM. Yes?

Ms. MINERVA. Senator, I would say that that particular section offers Federal agencies an opportunity to work with States as well. I don't think we should forget our State partners.

One project that EPA is engaging in right now is working with New Hampshire to identify critical habitat in the New Hampshire area, one way among others that EPA is using, is exercising affirmative confirmation responsibilities.

Mr. WALSH. I would like to add a few remarks on that on behalf of the Department of Defense. We have taken that responsibility quite seriously, and we have several efforts going on across the whole country. For instance, in the southeast, we are putting in ar-

tificial cavities to help the Red-cockaded woodpecker.

We already talked about reintroducing the red wolf into Dare County range. We're doing some captive breeding of the loggerhead shrike on San Clemente Island. I think one area that we're being particularly successful in is with the least Bells vireo, which exists at Pendleton. In fact, over the last 6 years, we've doubled the number of nesting pairs from about 99 to about 200. So I think we're being very aggressive in this area and meeting our responsibilities.

Ms. MERIDITH. On behalf of Bureau of Land Management, I don't

think we have any problems with the law itself. We think it's a

good law.

Application of the law through regulations and processes is very important when you get down to the local level, and that's what I think you're seeing exhibited this morning, a change indicating that agencies are working together. Also, I think we're putting a lot more emphasis on prevention rather than trying to put out the fire after the fact. We're entering into a lot of different conservation agreements. We're working with the local populations. We're working with State agencies as was mentioned.

I think the big difference that you're seeing now is how the law is applied. I'm a wildlife biologist, and I've never been as encouraged as I am today in the 22 years I've been with the Bureau of Land Management, that we're all finally working together and looking at the whole picture, not just a species by species basis, not just Fish and Wildlife Service versus BLM, but we're looking at the

whole system as a whole.

Senator Graham. My time has expired. Senator Faircloth, you did not have an opportunity to make an opening statement, so if you would like to do so at this time, as well as questions.

#### OPENING STATEMENT OF HON. LAUCH FAIRCLOTH, U.S. SENATOR FROM THE STATE OF NORTH CAROLINA

Senator FAIRCLOTH. Well, thank you, Mr. Chairman, I'll put my statement in the record and go right to the questions.

[Senator Faircloth's statement follows:]

STATEMENT OF HON. LAUCH FAIRCLOTH, U.S. SENATOR FROM THE STATE OF NORTH CAROLINA

Mr. Chairman, I appreciate your willingness to hold this last EPW hearing of the Congress on the Endangered Species Act (ESA). As a lifelong farmer, understand the value of wildlife. I have grown up with it and protected it without government guidance. But also as a farmer, I understand the incredible burden being placed on private land owners and public resources to meet the mandates of this Act.

I certainly wasn't here when Congress passed the ESA. In fact, neither was the Chairman or anyone else on the committee. But I can understand why most Senators voted for the bill-voting against a law that protects animals is like voting

against apple pie—everyone loves animals.

The problem, Mr. Chairmen, comes when the bureaucracy gets out of control and we hurt people in order to protect animals. That is precisely what is happening all

around the country.

For instance, in North Carolina we have thousands of acres of valuable timberland which cannot be cut because the Fish and Wildlife Service believes it may harm Red-cockaded woodpeckers. People who have owned land for generations are not allowed to cut their own trees. By any reasonable measure the government has seized their trees and denied them compensation. Unfortunately, the bureaucracy and the environmental industry do not care about the reality outside of Washington. They prefer to use the Endangered Species Act and the animals themselves as a tool to create de facto Federal land use regulations nationwide. The ultimate result being thousands upon thousands of overlapping habitat ranges for each and every bug, snail, and fly the bureaucrats think we need more of.

Mr. Chairman, the important questions is what happens when virtually all land

is home to a protected animal—what happens then?

This is a very serious question. It has happened in Idaho, Senator Kempthorne's State. As he has shown the committee, virtually all of Idaho is regulated as home to some sort of government protected animal. Thousands of acres of valuable farmland have been locked off to protect an underground water snail called the Bruneau Snail. This kind of thing is going to happen everywhere when the environmental

industry gets its way.

Mr. Chairman, the bureaucrats are going to tell again today how "eco-system management" is the solution to the clash of protected species and humans. They will tell us again that if we give them more control—total control over the whole entire natural system of an area—they can fix things. I think that is the classic excuse of a bureaucrat, they always tell us that by giving them more power they can fix the mess they have already made. I think "eco-system management" is nothing more than a power grab masquerading as a solution. Another excuse for less individual control and more government control.

Senator FAIRCLOTH. I must say that it's an impressive group this morning, and I'm sure there are some endangered species in this world, but Federal bureaucrats willing to spend the taxpayers dollars to protect them are not one of the endangered species. I can see that there's a lot of protection going on.

Mr. Walsh, you talked about the southeast a lot, and the Red-cockaded woodpecker, and it's an area I'm fairly familiar with. I notice your accent. Where are you from? Where are you a native of?

tice your accent. Where are you from? Where are you a native of?

Mr. WALSH. I was originally from England, but I came over to

this country when I was 13.

Senator FAIRCLOTH. Your accent has held up well.

You've taken some 13,000 or 14,000 acres of the Fort Bragg Military Reservation for the Red-cockaded woodpecker, is that right?

Mr. Walsh. I can't speak authoritatively on the acreage.

Senator FAIRCLOTH. I'm sorry?

Mr. WALSH. I cannot speak authoritatively on the acreage.

Senator FAIRCLOTH. All right. You've reserved it for the woodpecker. Right now you are trying to buy Overhill, the Rockefeller Estate, which is adjacent to it, which is 15,000 acres, because they need more training ground. Do you think that's a wise expenditure of the taxpayers' money to block out right in the middle of Fort Bragg, 12,000 to 14,000 acres, and at some \$20 million or whatever they settle on, to buy 15,000 more acres which you all might decide has woodpeckers on it, too? Is that a good expenditure of the taxpayers dollars?

Mr. WALSH. Well, we have to make a judgment between the need for military training and of course following the law in the preser-

vation of the Red-cockaded woodpecker.

Senator FAIRCLOTH. Well, I don't think there's any question that the woodpecker's first, that's certainly what you've done so far over there.

Another thing is, this land was taken, do you know when Fort

Bragg was established?

Mr. Walsh. No, I don't know the exact dates.

Senator FAIRCLOTH. All right. It was taken by eminent domain. Hundreds of small farmers were moved out prior to World War I, forced off the land, because of, and led to believe for a very patriotic duty they were surrendering it for military training to stop the Kaiser.

Now, if the lands were taken with the full intent and purpose, and these people sold it at sacrifice prices for military purposes, do you think you have some obligation to offer it back to them if you aren't going to use it for military purposes, or is saving the woodpecker a military purpose?

Mr. WALSH. I can't really answer that question. Again, we have to look at more seriously the way the importance of preserving that

particular----

Senator FAIRCLOTH. The importance of what?

Mr. WALSH. Of preserving that Red-cockaded woodpecker in a

total ecological system.

Senator FAIRCLOTH. Well, how about preserving the people that owned the land before? I mean, there was no concern to preserve them. They were simply told to move, we're going to establish a military base here. Are they not an endangered species?

Mr. WALSH. I agree with you, Senator, they would have to be

taken into account, they should be taken into account.

Senator FAIRCLOTH. Mr. Fenn, you gave a great talk, and Senator Graham enjoyed it very much and so did I, on the protection of the Everglades. Who destroyed the Everglades to begin with?

Mr. Fenn. I think it was a combination of things, but largely it was the ecological balance there was upset by the need to change the water delivery system, the flood control, for agricultural development purposes and to support human use and development along the coast there.

Senator FAIRCLOTH. Mr. Fenn, in a word, who put up the money to destroy the Everglades, and what agency of the Federal Govern-

ment did it?

Mr. Fenn. Well, I suspect that most of it was done with public funds, both State and Federal. Much of the water or flood control systems comes under the responsibility of the Corps of Engineers. But it was a lot of different groups involved, I think.

Senator FAIRCLOTH. You referred to the Kissimmee River. What is that known as under the Corps of Engineers current designa-

tion?

Mr. FENN. I'm afraid I'd have to let the Corps representative answer that question. I don't know.

Dr. ZIRSCHKY. Senator, we refer to it as the Kissimmee River

Ecosystem Restoration Project.

Senator FAIRCLOTH. What's it called now? Dr. ZIRSCHKY. It's still the Kissimmee River.

Senator FAIRCLOTH. Channel Number 10?

Dr. ZIRSCHKY. There are a number of—

Senator FAIRCLOTH. Didn't you channelize it from the Kissimmee Cattle Company all the way down into the—

Dr. ZIRSCHKY. Yes, sir, at the direction and authorization of Con-

gress, we did that.

[Laughter.]

Senator FAIRCLOTH. Now what are you doing to it now?

Dr. ZIRSCHKY. Under the direction and funding of Congress we're restoring it.

Senator FAIRCLOTH. You channelized it. It's no longer a river. It's

listed by the Corps as Channel Number 10.

Dr. ZIRSCHKY. It's a very straight river, sir, yes. Senator FAIRCLOTH. Now what are you doing to it?

Dr. ZIRSCHKY. Under the direction of Congress, we are restoring the meanders of the Kissimmee River.

Senator FAIRCLOTH. Now you're spending Federal money so it will meander south again, is that right?

Dr. ZIRSCHKY. Yes, sir.

Senator FAIRCLOTH. The Corp built the levee around Okeechobee after 1928, raised the level in the river, St. Lucie, Palm Beach, all the canals, guaranteed the water level in the canals so it could be developed by agriculture, not a farmer in this country could have developed an acre of it if you hadn't drained it, channelized it, pumped it and said now farm it.

Has the wisdom of Government increased so dramatically in the last 40 to 50 or 60 years that there is absolute infallible brilliance now, that you could not be wrong with the endangered species or the EPA, and yet 60 years ago, you were infallible when you were destroying the Everglades? Are Federal agencies a lot smarter now

than they were 60 or 50 years ago?

Mr. FENN. I wasn't, of course, alive 50 or 60 years ago. But——Senator FAIRCLOTH. Well, I was, but I didn't know much about the Everglades.

[Laughter.]

Mr. FENN. I'm not so sure that 50 or 60 years ago, many people did know that much about the Everglades. I think the reality is that the Everglades are absolutely unique. You can't go anywhere in the world and find anything near like the Everglades. We've learned that in the process of that kind of development, we are in effect changing, in reality destroying, what the Everglades was under natural conditions.

So I think we learned, Senator, in time, and I hope we can learn

and correct, at least to some degree, some of the mistakes—

Senator FAIRCLOTH. All right, let's move to something more current.

Senator GRAHAM. Senator, I'm sorry, but your time has expired.

Senator FAIRCLOTH. Well, I thank you. Senator GRAHAM. Senator Kempthorne?

Senator KEMPTHORNE. Mr. Chairman, may I ask, will we have

more than one round of questions?

Senator GRAHAM. If the Senators would like to have more than one round, we will have. Would the panel like to have more than one round?

[Laughter.]

Senator GRAHAM. Unfortunately, in this form of democracy, they

don't get to vote.

Senator KEMPTHORNE. All right, Mr. Unger, if I might, I will start with you. We discussed earlier today about the devastating fires. I have had briefings that the devastating forest fires that are now destroying hundreds of thousands of acres will continue.

We have a severe forest health problem. Drought certainly adds to that, it stresses the trees, then the insect infestation attacks those stressed trees, etc. So you have a number of elements that

take part in this.

The University of Idaho came out with a study recently that stated that the trees are dying faster than they're growing in the Idaho forests. Do you feel that, from your perspective, do we need to begin to implement some forest practices that actually can be carried out in order to try to bring about forest health, and what are some impediments to doing so, if in fact you think that we ought to be moving forward with that type of program?

Mr. UNGER. Obviously, the forest health problem is something that's high on the agenda these days, and the current fire situation, to which the excessive fuels and the drought have all contributed, has raised the profile of that issue. In fact, we have a team from the field that has been working for a month and is going to make its report to us today on some ways to look at immediate actions that can be taken as well as longer range proposals to put before you and the Administration as to what we might do to improve the situation.

We need to look at our fire suppression policies. We need to look at our prescribed fire policies. We need to look at opportunities for salvage thinning, other operations that may contribute to forest health. We need to do all of this, however, in accordance with all the requirements of law, the Endangered Species Act, the Clean Water Act and all of the other environmental protection statutes.

Senator KEMPTHORNE. Would you agree with me that these wildfires do contribute to the loss of species? In fact, I think it was the Umatilla River, a 36-mile stretch, that an entire fish kill of the spring chinook took place, so that these wildfires which are being predicted, will continue in devastating proportions if we don't do something. It's all tied together

something. It's all tied together.

Mr. UNGER. Well, I haven't read that particular study, but obviously, an intensive wildfire can result in damages to wildlife, plant species of significance, and other resources. It depends upon the intensity of the fire, the location, in fact, I don't think one can generalize and say that all wildfires result in these specific kinds of effects.

But we have to look at the individual cases. We are going to be looking, and are looking right now and through the early fall at the impacts that the fires that have occurred this fire season have had on resource values, including threatened and endangered species.

Senator KEMPTHORNE. You stated that the Endangered Species Act was an element that has to be dealt with as you move forward. Can you tell me how many different proposed actions have been submitted to NPS for consultation?

Mr. UNGER. I don't have the exact number, but individual projects such as timber sales or recreation projects or grazing allotments and so forth, number in many hundreds; and in the thousands, actually.

Senator KEMPTHORNE. Okay. Can you tell me, how many formal

consultations on the salmon have been completed?

Mr. UNGER. I don't know that number.

Senator KEMPTHORNE. Okay. Dr. Foster, can you help me with that?

Dr. FOSTER. No, I can't, but we can certainly get that number for you.

Senator KEMPTHORNE. I'd appreciate it.

Dr. FOSTER. The number of requests, and how many formal consultations?

Senator KEMPTHORNE. Yes, have been completed in the 135 days required by law. It's my understanding that it's zero.

[The information referred to by Dr. Foster follows:]

1. Number of consultations (formal and informal) initiated by the Forest Service:

Formal: 49. Informal: 14.

2. Number of formal consultations with the Forest Service that we have completed: 11 formal consultations with the Forest Service have been completed. In addition, 6 consultations were converted from formal to informal and completed as such. All other consultations on ongoing actions with the Forest Service have been suspended by agreement with the Regional Foresters pending completion of programmatic consultation on the forest plans pursuant to the recent Ninth Circuit Court decision (PRC v. Thomas).

3. Number of formal consultations with the Forest Service completed in the 135-day allotted period: 11 formal consultations were completed within the statutory time period, which is 135 days from the date of receipt of a complete Biological As-

sessment, or as provided by mutually agreed to statutory time extensions.

Mr. UNGER. I just asked one of our staff people, and although we don't have the total number that were submitted, about 18 percent of them have been approved.

Senator KEMPTHORNE. I would like you to submit it for the

record, so we can see what the numbers are.

Okay, I'll wait for the next round. Thank you.

Senator GRAHAM. I'm going to waive my questions for the next round. I know that some have to leave for 11:30 meetings, and we have to be someplace at 11:45. So I will waive my second round questions.

Senator Kempthorne?

Senator KEMPTHORNE. Okay, great. Dr. Zirschky, John, in your written testimony, you specifically state that the current scientific information and data on the Pacific Northwest salmon's life cycle is inadequate to support management decisions. Would you please give me more specifics on your thoughts?

Dr. ZIRSCHKY. One of our difficult issues to work with on the salmon issue is that there are a number of things other than just hydropower that affect the survival of the salmon. What the public sees, though, in their mind, are dams. They're big, they're easily

seen, drawing the water level down has significant effects.

We don't believe that we accurately know what percentage of the problem is caused by the dams nor do we have good data on how

changes in operation affect the survival of the salmon.

Senator KEMPTHORNE. Okay, now, Dr. Zirschky, this summer, as you know, the Corps was ordered to conduct the spilling of water over eight dams to drain Dworshak Dam dramatically. I believe after 10 days of the spilling process, it was stopped. It was determined that it was creating a dissolved nitrogen level that was harmful to the fish. At Dworshak, and other stretches of the river, we had thousands of cocinee salmon that were dead. Interestingly

enough, the cocinee is a different species, but the feeding base for the bald eagle.

Do you believe with those types of practices, that we are experimenting, or are we using good, hard science to direct these actions?

Dr. ZIRSCHKY. It was intended as a test, so I would say that yes,

we were experimenting.

Senator KEMPTHORNE. Is it accurate that after 10 days of the one test of the spilling, that it proved harmful to both the species we were trying to save as well as other species?

Dr. ZIRSCHKY. That I don't know, Senator. We could get you our

analysis.

Senator KEMPTHORNE. Okay.

[The information referred to follows:]

It is my understanding that National Marine Fisheries Service personnel found symptoms of gas bubble disease in juvenile salmon following the spilling of the lake water. The Service is currently preparing a follow-up report on the results of the spill. The Corps is cooperating in the preparation of this report, a copy of which will be provided to the Subcommittee when completed.

Senator KEMPTHORNE.Dr. Foster, would you comment on that?

Dr. FOSTER. The question, I'm sorry, your last question?

Senator KEMPTHORNE. With regard to the experimentation of the spilling over the eight dams; we stopped that, it was determined that we had the nitrogen level that was such that it was causing damage to both the species we were trying to protect as well as other species.

Dr. FOSTER. Yes, that's true. There was conflicting scientific opinion when we went into that, and since it was a test, we did go into it knowing that we may have to stop it. As quickly as we could, we did pull together a group of people who were supposed to be leading authorities on gas bubble disease, we had the workshop.

Unfortunately, if it were a perfect world, that would have all been done ahead of time. I do think that you'll see less and less of that with this unprecedented MOU that we just signed. One could argue that the Federal Government should have been doing all these fantastic things in any case. But sometimes it takes a forcing mechanism, like actually signing a piece of paper, that gets you in the habit of doing that. I think you're going to see increased cooperation and discussions before these decisions are made.

Senator KEMPTHORNE. Okay. Dr. Zirschky, in the case of Dworshak Dam, is it accurate to say that part of the mission, when that dam was built, was for the reservoir to provide for recreation and economic development opportunities to the surrounding com-

munities?

Dr. ZIRSCHKY. Yes, it had a number of missions, flood control, hydropower, and recreation.

Senator KEMPTHORNE. So it was?

Dr. ZIRSCHKY. Yes, sir, I believe so.

Senator KEMPTHORNE. So again, doesn't this put us in conflict, Dr. Foster, that when we begin these types of experimentacion, when we say to communities that have been natural resource dependent, we say, you really should diversify your economy and go to recreation, then when we drain the reservoir that provides that recreation, again we're in conflict, are we not?

Dr. FOSTER. Well, that's an instance, I think, when you are looking for a balance. I think that you will see a lot of discussion and

a lot of preplanning before we do that again.

Mr. Beard. If I could, Senator, give a different answer to that, from a little different perspective. I'm not sure I agree that we are in conflict. We as Federal agencies with water resource responsibilities operate not only under the individual statutes authorizing that facility, but the Fish and Wildlife Coordination Act, which gives us general authority for fish and wildlife. We also have our responsibilities under the Clean Water Act and the Endangered Species Act.

So we have not only the individual authorization for that particular dam, which has recreation as one of the project's purposes, but we may also have in that particular authorization fish and wildlife responsibilities. If we don't, we certainly have it under other statutes. So you have to look not only at the individual project, but also the general authorities. We must meet our obligations under those

general authorities as well.

Senator KEMPTHORNE. To conclude this series of questions, Dr. Foster, in what instance in which the communities are dependent upon the system, and in which we also are trying to save an endangered species, causing you to undertake such experimentation, is the impact to those communities in your decision taken into account? Do you take the communities into account?

Dr. FOSTER. Yes.

Senator KEMPTHORNE. Under the current Endangered Species Act?

Dr. Foster. Of course, we do. The Endangered Species Act does allow us, if there's more than one way to get a result, or if you can modify an approach to get a result, you would definitely take the approach that's going to have the least socioeconomic impact.

Senator KEMPTHORNE. Correct. I agree with that.

But ultimately, you must do what is necessary for that species

regardless?

Dr. Foster. Well, I don't think it's often come to that. At least, not in our experience, where it's been regardless. I don't think that, I think that in all the section 7 consultations that we've been involved in, I don't believe we have ever actually resulted in total cessation of a project. What happens in almost every case is the project is modified and it goes forward.

Senator KEMPTHORNE. Again, unfortunately, I'm out of time. I'll

yield.

Senator GRAHAM. We are now finished the second round. I'm waiving my time. Do you have further questions, Senator Faircloth?

Senator FAIRCLOTH. Yes, I do, Mr. Chairman.

Just one quick question, Mr. Walsh, on Fort Bragg, and I'll get off of that. Right now there are four species being protected at Fort Bragg. A butterfly is going to be added right away to make that five. There are 70 more State and Federal species in line to be added. If four species require 13, 14, 15,000 acres, what's going to happen 5 or 10 years from now when there are 40, 50, 60, 70 more species added? Will there even be land left to train on?

Mr. WALSH. I'm afraid I can't answer that question. It would be speculative at best.

Senator FAIRCLOTH. I'm sorry?

Mr. WALSH. I say, it would be speculative at best, any answer

to that question at this time. I don't have the information.

Senator FAIRCLOTH. Mr. Davison, if the Red-cockaded woodpecker decided your backyard would make a nice home and he built there, how would you feel and what would you do? Would you rejoice at the privilege that he had chosen your backyard and give your home up to him, or what would you feel?

Dr. Davison. How I'd feel would probably be whether I was de-

endent----

Senator FAIRCLOTH. What, now?

Dr. DAVISON. I think how I would feel would be dependent on whether I was trying to make a living off that property. I would—

Senator FAIRCLOTH. I said your home, where you live. Would you

be willing to move and give it up to the woodpecker?

Dr. DAVISON. Would I be willing to move? I don't know that I would be faced with that choice. I guess I'm not sure I understand the question.

Senator FAIRCLOTH. You don't know what?

Dr. DAVISON. I'm not sure I understand the question.

Senator FAIRCLOTH. The question is, if a Red-cockaded woodpecker made his home in your backyard, and the Government determined that your living there was disturbing the woodpecker, would you rejoice in the opportunity to move? Now, that's the question

Dr. Davison. No, I would not rejoice in moving. But I don't think that that situation would present itself. If I was already living there, and a Red-cockaded woodpecker moved in, that I would be forced to move. I don't see anything in the Endangered Species Act that would require that.

Senator FAIRCLOTH. Well, you'd lose the use of your backyard.

You couldn't walk in it.

Dr. DAVISON. No, sir-

Senator FAIRCLOTH. Or build a fire in it, or a lot of things. The

next question.

The American alligator is listed as an endangered species in Sampson County, the county that I have lived in all of my life. But no one there has ever seen an alligator in the county. Are you telling me that the bureaucracy is not going to be satisfied until we have some alligators to protect there? Are we going to bring some in to protect? Why is it an endangered species in a county that it has never been native to, or in the last 100 years, no one has ever known of one being there?

Mr. Davison, would you answer that?

Dr. DAVISON. I'm not sure I can answer the specifics of that question.

Senator Graham. I'd like to say one thing. The purpose of this hearing was to discuss the application of the Endangered Species Act on public lands. We had a previous hearing on the application on private lands. I think the witnesses were all asked to be prepared to comment on that subject.

I think if there are subjects that are other than that, or as detailed as we might want to pursue, I would suggest that maybe questions that could be submitted for subsequent response would be more enlightening than attempting to ask questions for which the witnesses were not asked to be prepared.

Senator FAIRCLOTH. Well, they've been testifying, Mr. Chairman, on private land involvement. In their opening statements, they talked on private lands. Anyway, I'll go on and ask another one.

Is it ultimately impossible to enforce and satisfy the Endangered Species Act? There are millions of species and thousands are candidates for protection. Is there any way that we can possibly create a bureaucracy large enough to monitor and design protection efforts for each and every one of them? Can it be done?

Dr. Davison. I think it probably cannot be done, Senator Faircloth. But I think that the Endangered Species Act is probably not an effective mechanism to provide for the conservation of thou-

sands and thousands of species.

But I think that that argues not for changing the Endangered Species Act, but for doing a better job under other Federal and State laws in managing our resources and balancing the use of those resources with other needs, so that species don't decline to the point at which they need protection under the Endangered Species Act, that that's the way to deal with that problem.

Senator FAIRCLOTH. One more question. We keep hearing about ecosystem management; over and over again I hear the phrase. Ecosystem management is nothing more than a catch-all phrase for expanding the jurisdiction of the bureaucracy to cover more than a single animal, and allow them to control everything, absolutely

everything associated with an entire natural area or region.

Is it a power grab masquerading as a solution? The question is, we constantly see the expansion of the Federal Government, the bureaucracy, into the intrusion into the private sector. Is

ecomanagement more of that?

Dr. Davison. I don't think it is. I think it's what Denise and others here have talked about and what I just talked about. I think it's the Federal agencies working together, coordinating their actions, coordinating those actions with State and local agencies to do a better job of managing our resources, balancing, doing the balancing, and preventing species from declining to the point at which they need protection under the act.

Senator GRAHAM. Senator Faircloth, I'm afraid your time is up. What I would hope we'd be able to do, we've got approximately 20 minutes before we're going to have to leave for the vote. We have another panel. We could move to that panel fairly promptly and ask them to limit their remarks to 3 minutes, we would be able to hear their testimony, vote, come back and ask questions of the

third panel.

Senator Kempthorne?

Senator KEMPTHORNE. Yes, Mr. Chairman, thank you. I'll withhold further questions. I would submit them to you and ask that you would please provide them for the record.

Mr. Beard, if you could for me then, the question that I'll be submitting to you is somewhat time sensitive, so perhaps at the first

of next week if you could get me a written response.

Mr. BEARD. Sure, and I would be happy to meet with you if you'd like, Senator Kempthorne. It may well be a faster way to convey the information.

Senator KEMPTHORNE. Great. I appreciate it. I appreciate the re-

sponse of the panel. Thank you very much.

Senator GRAHAM. Thank you very much. I appreciate the insights and information provided by each of the members of our second panel. There may be, as indicated some subsequent follow-up questions for which we would also appreciate your attention.

In order to try to complete the initial presentation by the members of panel three before we will have to take a brief interval to vote, I would like to introduce the members of panel three and ask if they would summarize their remarks in up to 3 minutes, and

then we will submit their full statements for the record.

Mr. Mark Brinkmeyer, President of the Riley Creek Lumber Company, in LaClede, Idaho; Hamlet "Chips" Barry, III, Treasurer of the Western Urban Water Coalition, Manager of the Denver Water Department; Judy Guse-Noritake, National Policy Director of the Pacific Rivers Council; Jim Little, Chairman, Endangered Species and Wildlife Subcommittee, National Cattlemen's Association; and Jeff Olsen of the Wilderness Society.

I thank each of you, I notice that a number of you have come from a considerable distance to share with us today, and for that

we are especially appreciative.

Mr. Mark Brinkmeyer?

# STATEMENT OF MARK BRINKMEYER, PRESIDENT, RILEY CREEK LUMBER COMPANY, LA CLEDE, IDAHO; ACCOMPANIED BY BECKY THOMPSON, CROWELL & MORING

Mr. Brinkmeyer. Thank you, Mr. Chairman.

I am Mark Brinkmeyer, President of Riley Creek Lumber Company, located in LaClede, Idaho, up in the Idaho panhandle. With me today on my left is Becky Thompson, who's a senior attorney with Crowell and Moring. I am obviously not an expert on the Endangered Species Act, but I'm here to talk about northern Idaho

and our company.

We're a small, family-owned corporation, approximately \$40 million in sales. We employ 120 people at our mill site, and 150 people in the woods. We have an operating working circle for procurement of logs of approximately 250 miles. We have been in business for 15 years, we have experienced the depression of 1982, the recession of 1985, the trial by fire and somehow we'll get through this ESA

process.

In the last 15 years, we've been able to promote responsible timber management on our lands, build one of the finer technological sawmills in the Pacific Northwest, and have operated under the philosophy that all of our profits are invested in new technologies and sound forest management. We are 60 miles from the Canadian border. Our area is rich in the tradition of forest products. Our area has been logged for over 100 years. Our forests have been actively managed, we have thriving communities and clean water.

However, half of the lands in our area are federally owned and managed by the Forest Service. On these lands, rapidly expanding restrictions and a proposed grizzly bear plan on the Priest Lake district, which is near and dear to the area that we live and work,

is affecting us.

The Priest Lake district in Idaho is 300,000 plus acres and has an estimated annual growth of 80 million board feet per year. The value of this growth is approximately \$16 million. Because of the problems with the Federal land management and the recent designation of the grizzly bear habitat, only 2 million board feet are now harvested.

Ironically, 20 miles away but within the range of the grizzly bear in Canada, it is hunted. The Forest Service with their plan is to affect 160,000 acres of this 300,000 acre district. They plan to do it by solely closing the roads, which will not necessarily reduce the bear mortality. Surprisingly, there is no scientific research to support this standard. This origin for road closure was a 1982 internal Forest Service report published without peer review. Unfortunately, the Endangered Species Act has no provision that prevents

bad or outdated science in shaping policy.

Ironically, in the area, the 70 percent closure will not diminish or enhance grizzly bear security. People, not roads, are a problem for bears. I cannot condone resisting good faith and well founded conservation efforts. I support the EŠA, but cannot support legislation that all too often pits wildlife against people. If our States and communities were more involved in a cooperative effort to manage endangered species, gridlock would end, innovation would be encouraged. I have no doubt that more than 6 species would be recovered in 20 years.

In the Idaho panhandle, there are numerous people like myself that are committed to backing up our talk with action. If we need to work with the Forest Service and provide money for restoration,

we'll help spend the money and work on the project.

In other parts of Idaho, there is now new concern over the ESA because of a court decision finding the Forest Service and National Marine Fisheries Services consultation process for the salmon to be invalid. This process took the better part of 2 years, now the court says they didn't do it right.

I am further concerned, even though we don't have the salmon in our area of Priest Lake, we do have the bull trout. If that species were listed next month, does that mean all work must stop immediately until another consultation is reinvented and completed?

Crisis management rarely succeeds. Endless discussions and confused deliberations seldom produce results. In the case of the ESA, both have generated failure. A revised Act must establish incentives for State and local governments to develop and implement plans that prevent rare species from reaching the point where list-

ing is necessary.

Mr. Chairman, in summary, we feel that we must indeed have strong peer review for the science. The balance issue has been talked about a great deal this morning. But for people like me who want to earn a living in the panhandle, we must have a common sense approach that is definable, that is conclusive, and most importantly, timely. Thank you.

Senator Graham. Thank you very much, sir.

Mr. Hamlet "Chips" Barry?

#### STATEMENT OF HAMLET J. BARRY III. TREASURER. WESTERN URBAN WATER COALITION

Mr. Barry. Thank you, Mr. Chairman. My name is Chips Barry. I'm the Manager of the Denver Water Department, and I'm here today as the spokesperson for the Western Urban Water Coalition, which is a consortium of the 18 largest cities in the American west, representing over 30 million people as customers of our various water utilities.

I'm going to shorten my statement somewhat, because I know you are under time constraints. I've positioned myself in the middle of this panel, because I suspect that's where our coalition falls in this ESA debate, and my testimony, written and oral, will reflect

that.

The Western Urban Water Coalition has a lot of experience with endangered species issues, and on Federal lands. We have experienced with spotted owls, marbled murrelets, anadromous fish in the Pacific Northwest, kangaroo rats, California gnat catchers and fish, terrestrial and bird species in the Colorado, Platte and Virgin Rivers. We've got a lot of experience, and we want to share a little bit of that with you today.

There's no question that the competition for water for municipal, agricultural and power purposes, and the protection of environmental values, are on a collision course in many respects. Application of the Endangered Species Act has added to those difficulties. We think there are some better ways to go about doing things. We applaud the Federal agencies for much of what they have done in the last several months by some new agreements and approaches.

I think that what's good and bad about the ESA can be summarized in five different areas. I'm going to touch on each one of those. The first one is Federal consistency. We are optimistic that recent actions taken by Interior to coordinate their efforts will bring greater consistency to Federal actions. The policies published by Fish and Wildlife and NMFS on July 1, the HCP policy announced recently in the interagency MOU announced yesterday are a good start.

There are other examples of interagency coordination, some in my own area, the Upper Colorado-Platte River, and the Federal ecosystem directorate for the Bay/Delta are all helpful. More, however, needs to be done. The test for all these policies is how they are applied in the field and what kind of guidance is given from

Washington.

Too often you get a policy announced in Washington that does not have an effect in the field. You need multi-agency teams elsewhere. Those teams need to be completely representative. As horrified as I was, and some of you were as well, by the number of Federal agencies at the panel that preceded me, there's a major Federal agency missing, and that's FERC.

FERC has a lot to do with dams in the west, and FERC was not at this table, and FERC does not appear to be in any of these MOAs and MOUs that have been announced. Part of my testimony

is, where are they? Because they are a major player.

Second topic I'd like to talk about, intergovernmental cooperation. Now, we all know that the listed species don't stay on Federal lands, and they don't read the Federal Register to see who has primary jurisdiction over them. For that reason, we need cooperation

and coordination between State, Federal and local agencies.

Now, Secretary Babbitt recently established a terrific initiative with the governors of Colorado, Wyoming and Nebraska on the Platte River. I'm very much a player in that, my agency is, in that negotiation. Fish and Wildlife Service and NMFS have established a new policy statement to ensure agency participation.

But I want to point out one flaw in that scheme, that's State agency participation. The coalition of members who I represent here today, that is the cities, San Francisco, Los Angeles, Denver, Settle, Portland, Reno, Las Vegas, we have no role in that new agency coordination. It does not allow for local agency participation

and it should.

The agencies I represent have an enormous physical and financial stake in how water and dams are managed. Yet the new policy really does not include local agencies. One of our things is to say

that we think it should.

The third topic I want to talk about very briefly is ecosystem management. There's been a lot of talk about it today, the concept is one that's being endorsed, and we applaud the fact that it's endorsed. We're not sure how to go about making ecosystem management a reality, but we think we all need to work on that. We think the Act ought to be amended to promote ecosystem based solutions, by, for example, authorizing prelisting agreements and multi-species recovery plans. I think if we're going to talk about ecosystem management, we need to put it in a law.

The fourth topic I'll talk about, sound technical analysis. It's easy to find anecdotal examples of lousy scientific work or questionable scientific work, and I don't want to get into the anecdotal stuff, because anecdotes shouldn't drive policy. It does seem to me that that concept of peer review, which is now being put in place by the agencies is very important and that situation has been improved by their reliance on peer review in listing and recovery decisions.

However, it seems to me those same principles need to be applied to ESA decisions such as section 7 consultations and critical habitat designation. We don't have the same kind of peer review ar-

rangements there, and we need to have them.

Also on technical analysis, the agencies can't do the technical analysis that we're going to need unless they get adequate funding. One of the problems of the Act is that it promises everything, but the funding isn't there to do it. While I am sometimes critical of the Act and the agencies, I also think they need adequate budgets to do what the law requires them to do. We can't get adequate science if they can't spend the money to get it.

Finally, the last thing is flexibility and creativity. I think the ESA issues can be dealt with if we allow the agencies to be flexible and creative. We need the agencies to work with us, to find ways to look at things in a new way and to provide things such as off-site mitigation, mitigation banking, adaptive management, etc.

Let me give you one short anecdote about Denver and the water system. We had one agency, the Fish and Wildlife Service, say that Denver should simply abandon its rights on the Colorado River, 71,000 acre feet, because we could replace that water with water from the South Platte. We had the Fish and Wildlife Service in an-

other region saying the water from the South Platte should all go to Nebraska and that the agricultural interests should not only not sell the water to Denver, but they should send it down the way to Nebraska.

And so you had Fish and Wildlife Service internally recommending inconsistent things, neither of which, frankly, were possible. The answer is not that kind of rigid approach. The answer is to sit down at the table with all the affected agencies and work out new ways to change the timing of the diversion, use, exchange and development of water in the South Platte River. That can be done if people will sit down and have a technical, not a political discussion.

Let me summarize now, sum up here and say that overall, I think the Western Urban Water Coalition is pleased by some of the progress that has been made by the Federal agencies in reforming ESA implementation. With additional administrative efforts and some changes in the Act, the ESA can become an effective conservation legislation that doesn't needlessly stifle resource develop-

ment or curtail existing uses.

The coalition I represent, and that is the 18 major western cities, are ready to assist, and we have good working relationships with many of these Federal agencies. We'd like to see this go forward. We take a moderate and progressive approach on these issues.

Thank you very much.

Senator Graham. Thank you very much, Mr. Barry.

Ms. Noritake?

#### STATEMENT OF JUDY GUSE-NORITAKE, NATIONAL POLICY DIRECTOR, THE PACIFIC RIVERS COUNCIL

Ms. NORITAKE. I'm the National Policy Director for the Pacific Rivers Council. I want to thank the committee for letting us speak before you today, and particularly Mr. Kempthorne, because I consider myself to be an Idahoan, having spent much of my formative years there, and most of my family is still there, a couple of college degrees from there, I think we attended college at the same time, actually.

I think much of the discussion today has centered around the debate about the chinook, the State of Idaho, and in Oregon and Washington. For those of you who don't know, the Pacific Rivers Council was lead plaintiff on those cases. So the experiences that I'm going to speak about center around those cases in particular.

The Snake River chinook are in serious trouble, as we all know. They only expect about 350 wild fall returning chinook this year past the lower Granite Dam. The other salmon species in the Pacific Northwest aren't in much better condition. They are about 95 percent below their historic levels. Even the returning runs this year for the chinook into the basin are about 85 percent below their 10-year average. So it's not a long and slow decline for the fish. We've reached the point where the bottom is actually dropping out very rapidly.

The listing of the chinook in 1992 served as a wake-up call that there was something wrong. It wasn't so much that there was something wrong with the fish, it was that something was wrong with the environment that they depended on. The ESA, as Senator Murray said this morning, was the wake-up call for that. It was

the fire alarm. It was the thing that said that we had probably not done our jobs up to that point, at least the Federal agencies, in exercising the other authorities that they had to operate under—NFMA, FLPMA, NEPA, and the other laws that Senator Murray mentioned.

Part of the result of this and the decline of the salmon, I know some of the other people on this panel have talked about their concern for being able to make a living in rural communities of Idaho, Oregon and other places; but, the thing that we have to remember is that we degraded our Federal lands, which serve as the primary

refuges even now for these endangered fish species.

This economic resource for a lot of the coastal fishermen and also the recreational industries, even in the State of Idaho and other places, has declined along with those fish. The salmon industry, even in 1988, commercial and recreational together, was about \$1.2 billion for the Northwest region. The coho fishery alone, 10 years ago, commercial, was \$100 million. That's shut down completely. There is not one commercially caught coho any longer, and it's 10 years later.

So we also need to factor in that, you know, an industry that supplied about \$1.2 billion 10 years ago, well, not even 10 years ago, 8 years ago, into the Northwest economy, is now gone. Protection of the environment for these species, which are really just indicators, also is a lot of protection for the economies and the people

that depend on those.

Again, as I said, the ESA is not the culprit here, that it's shutting down businesses and industry. It's an indicator that there's something seriously wrong with the environment that these businesses depend on. We need to listen to that. It's not broken. We need to have better enforcement of the laws before we get to the point that a species is listed. We need to have better consultation and enforcement of ESA once it is listed.

That's sort of the case of what's happened in the Umatilla and Wallowa-Whitman, in the Oregon forests, which comprises one suit that we filed, which is a little bit further along in the process, but

still underway. It's also the basis for the six Idaho suits.

I have a chronology in my testimony that outlines what we really see as a pattern of delay and denial by the Forest Service in implementing their responsibilities under the Endangered Species Act. I won't go into that in detail, but it does make very interesting read-

ing.

The one thing that I would like to say is that when the fish were listed, when they were even petitioned in 1990 after the forest plans were in place, the Forest Service acknowledged that their plans were inadequate to protect the fish species, and yet they didn't act, take proactive steps. There were a number of studies that the Forest Service itself completed, some with other agencies, some with outside groups, that said that they needed to redo those plans, because they were inadequate.

Again, they didn't do that. They delayed consistently with developing any alternative measures to deal with the fish on the plan

level.

After we filed a petition for listing and the fish were listed, we then went ahead and filed suit on the forests. During the time that

these suits have gone forward, the Forest Service itself has conducted more than 20 timber harvests and 10 road projects, which they had determined would adversely affect the fish, without consultation with NMFS as required under the law, a flagrant violation of their duties under the Endangered Species Act.

In October of last year, the district court ruled in our favor that, in fact, the Forest Service had to consult, not just on the project level, but also on the plan level. They ordered the Forest Service to submit the plans for consultation. The Forest Service never asked for a stay for that order, but they did not comply with the court order until we had asked for a preliminary injunction.

That injunction was put in place this year, in July. So it was October of last year until July of this year that they delayed in submitting those plans, or actually when the injunction was put in place. Then lo and behold, the plans were submitted for consulta-

tion.

We also don't believe that the biological opinions that they've submitted were done in good faith, and that the pattern is being repeated now in the State of Idaho, in those six forests. That hasn't played out as far yet. We'll see how far that's gone. They have submitted plans just recently in the last several weeks for consulta-

One other thing that I'd like to note is that the National Marine Fisheries Service needs to be commended for the step that they've recently taken to do a comprehensive review of the remaining salmon stocks in the Pacific Northwest which are not currently under review from endangered species actions. I think that's a step forward. They are not without some taint as far as what's gone on in these two particular suits.

There is attached to my testimony a compilation of where the various biological opinions sit on the watersheds in the State of Idaho, and it sort of paints an outline of how the National Marine

Fisheries Service is responding.

I'd like to make one more comment to something that Senator Kempthorne said. He mentioned wildfires in the State of Idaho contributing to the demise of the salmon, and that we needed to act proactively to go in and salvage before and after the fire situation. I would like to submit for the record a letter to the President dated September 19th which addresses that specific question, signed by five leading scientists that deal with aquatic ecosystems and specifically with the fire situation as it relates to fish after the Yellowstone fires.

And what they say actually goes completely against what Senator Kempthorne said, that fires are a natural part of the regime, the fires that are going on currently are not catastrophic in nature as far as the fish are concerned, the worse thing that we could do is go into those burned landscapes and punch roads and salvage. That's going to exasperate a situation, that over time the fires in fact benefit the fish. So I'd like to submit that for the record.

The other thing I'd like to submit for the record is a document regarding the Wallowa-Whitman and Umatilla economic effects of the injunctions in place there. Basically what it says is that there is virtually no adverse economic effect from those injunctions because of a number of circumstances. I would be pleased to answer

more questions about that later.

I'd also like to make one correction to my written testimony, in that I reported a number of 3,645 species of special concern identified in the FEMAT report. The 5 is an extra, it's 364, and I hope we never get to that larger number. Thank you very much.

Senator Graham. Thank you very much.

Mr. Jim Little?

# STATEMENT OF JIM LITTLE, CHAIRMAN, ENDANGERED SPECIES AND WILDLIFE COMMITTEE, NATIONAL CATTLEMENS ASSOCIATION

Mr. LITTLE. Thank you, Mr. Chairman. My name is Jim Little, I'm a third generation cattle rancher from Emmett, Idaho, where grazing cattle on public lands is an essential part of our business.

I'm here today to address the reauthorization of the Endangered Species Act on behalf of the National Cattlemen's Association, which represents 230,000 cattle producers nationwide. I am Vice Chairman of the Private Lands and Environmental Management Committee of the National Cattlemen's Association, and Chairman of the Endangered Species and Wildlife Subcommittee.

The U.S. Congress now must conduct a comprehensive review of the Endangered Species Act after more than 20 years since enactment. The Endangered Species Act was first written and enacted with the noble and justifiable objective, and one embraced in the National Cattlemen's Association policy, of saving species from ex-

tinction.

Yet after more than 20 years, the Endangered Species Act has failed to achieve this objective. The application of the Act has increasingly resulted in severe, widespread damage to property rights, jobs, entire regional economies and basic human needs. Clearly, the law is troubled and must be reformed.

The cattle business is particularly impacted by the Endangered Species Act. Cattlemen graze cattle on over half the surface of the United States. These pastures and rangelands are, relatively, some of the least manipulated of all the lands in this country. As such, these lands provide habitat for many of the species now listed as

threatened or endangered.

Cattlemen should be endangered species' best friends, and we would certainly like to be. However, the current law and its implementation by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service provides nothing but disincentives to

those with the greatest opportunity for protecting the species.

My personal experience is with habitat for the spring chinook salmon. Long before it became apparent that the salmon was going to be listed, the U.S. Forest Service had worked with affected grazing permittees to design a grazing system that would not disrupt salmon spawning or rearing habitat on the Boise National Forest. The plan was based on exhaustive meetings of interagency teams and permittees between 1990 and 1992, and extensive Forest Service monitoring for plan effectiveness was conducted in 1993. No statistical difference can be found between grazed and ungrazed areas for salmon protection.

In December of 1993, the Forest Service submitted a plan of operation for the 1994 grazing season to the National Marine Fisheries Service for approval. The Fisheries Service was required to respond to this plan in 135 days. The Forest Service still has not heard from them. The Forest Service considered the plan adequate and notified the National Marine Fisheries Service of their decision. The Forest Service had no choice but to allow the 1994 grazing season to begin at its regular time without National Marine Fisheries Service approval.

Another example in Idaho this year is the huge wildfires, which cost in the hundreds of millions of dollars to manage, not extinguish. I hear privately the fish biologists with Endangered Species Act responsibility are limiting firefighters' efforts to stop these fires. The cost must be assessed to the salmon recovery efforts. There must be limits and controls to this runaway problem of unlimited intrusion into necessary activities. Common sense is des-

perately needed in the Endangered Species Act.

It seems that economics are totally ignored in the quest for an attempted recovery of listed species. The National Wilderness Institute has put together a book of examples of out of control spending for endangered species. I would recommend that each of you review

the information contained in this book.

Senator Graham. Mr. Little, I must apologize. I thought Senator Kempthorne was going to be able to return so that we would not have a break in this panel as a result of the vote that's underway. I have just been informed that he is not going to be able to return and I'm going to have to leave now in order to be able to make this vote.

So if you would indulge me for a brief recess, we'll return and we will resume with your testimony, complete the panel, and then there will be a period for questions.

Mr. LITTLE. Thank you.

[Recess.]

Senator KEMPTHORNE [assuming the chair]. Ladies and gentlemen, we will reconvene this hearing, and Mr. Little, it's my understanding that you were partially through your testimony. So let me go first to you, and we appreciate your indulgence. These votes are not necessarily scheduled, so you often see us depart.

With that, Mr. Little, if you'd like to proceed.

Mr. LITTLE. Thank you, Senator.

Where I left off, these are but a few example of what happens with the Federal Government attempts to apply the Endangered

Species Act and it seems to end up in bureaucratic gridlock.

Finally, and most importantly, the Endangered Species Act must recognize impacts on private property rights. Landowners have been prohibited from cutting trees, clearing brush, planting crops, building homes, raising livestock and protecting livestock from predators, essentially depriving them of the only economic uses they can make of their property. In turn, they contribute less to local and regional and national economies.

The Endangered Species Act is broken. It is failing to aid truly endangered and threatened species and imposes a heavy burden on a few individuals for the supposed benefit of all. An almost complete lack of incentives to landowners in the command and control

policies of the Act has produced a high level of frustration in those that have the greatest opportunity to provide protection for the

species.

People are less inclined to admit the presence of a listed species on their property. As a result, it is the species that pay the costs. It must be admitted now, before more species become the victims of this noble but broken law, that the Government cannot adequately protect species until it allows landowners to become willing partners in the preservation of threatened and endangered species.

Once again, I want to thank you for the opportunity to provide the National Cattlemen's Association's views on the reform of the Endangered Species Act, and strongly urge immediate reform of this Act. I would be pleased to answer any questions you may have.

Thank you.

Senator KEMPTHORNE. Thank you very much, Mr. Little.

Mr. Olsen?

#### STATEMENT OF JEFF OLSEN, THE WILDERNESS SOCIETY

Mr. OLSEN. Thank you, Mr. Chairman.

As Director of the Wilderness Society's Arnold Bolle Center for Ecosystem Management, it's a real pleasure to be here today regarding the Endangered Species Act, and specifically on the role of

Federal land management policies on species endangerment.

About a year ago, the Wilderness Society released its study of federally listed species. Of the 777 species that are currently listed, the findings were remarkable. About two-thirds, just under two-thirds of those species, are on the list in part or in whole because of policies that promote resource extraction rather than stewardship of the public trust. Keep in mind the Federal Government is the Nation's largest landowner, accounting for about a third of the total land mass in this country.

Of those species that are listed, extractive uses are causal factors in more than 45 percent. By that I mean, timber, grazing, hunting. Other uses include water recreation, water development, such as dams, flood controls, water diversion and dredging. These account

for nearly a third of all species listed.

The bottom line here is that the Federal Government is steward of the Nation's, or about a third of the Nation's land base, is also the primary steward of biological diversity in this country. Caution and care should be the watchword for management of those resources.

Unfortunately, subsidized resource extraction is at the bottom of many of these problems, and these subsidies occur in really two kinds. The first are resources that are sold for prices that really fail to capture the full costs of offering those resources for sale. The second are resources for which the Federal Government intentionally sells the resource or service for prices that are less than their fair market value.

Timber sales below cost is an example of the first. Mineral rights in mineral lands patented under the General Mining Law of 1872 is an example of the second. Taken together, these subsidies represent a substantial expense for the taxpayers, estimated at more than \$1 billion a year by the CAO.

than \$1 billion a year by the GAO.

Recently, the Department of Interior, in looking at the needs of endangered species and the needs to recover those species found that over the next 10 years it would require an annual expenditure of approximately \$100,000 to \$200,000 per species. Currently, we are spending less than \$10,000 for each species on that list.

The costs in human terms are also important, in terms of jobs that are affected and communities whose economies are affected by policies that endanger species. The issues of jobs has frequently been discussed, but rarely has the full story been examined. The fact of the matter is, in many cases, policies that could have prevented listings were known well in advance of the final decision to

And a case in point, of course, has been the Pacific Northwest, where during the decade of the '70s and the '80s, continuing to cut timber on Federal lands at rates that exceeded 6 billion board feet ultimately resulted in the destruction of the habitat for the northern spotted owl, and the need to list that species in 1990. Clearly, the seventies, when the problem first became known, steps could have been taken that would have avoided the need for the emergency efforts that are now underway in the Northwest.

Perhaps another example is the case of the Pacific salmon. According to the American Fisheries Society, more than 200 of the region's salmon stocks are currently at risk, that is, at risk of extinction, or are of special concern in that region. Judy has talked about

that prior to my testimony.

Salmon are central to both the Northwest culture and its economy. The fish economic importance is tremendous. The salmon population declines have wiped out jobs, income and those losses continue to escalate.

The problem of species endangerment, then, results from many factors, but almost all boil down to habitat loss caused by human development activities. Where Federal land is involved, which is the case for more than two thirds of currently listed species, the Government can go a long way toward preventing species endangerment by correcting policies that focus on resource extraction at the expense of stewardship of those national resources in the public trust.

So to correct this imbalance, the Wilderness Society recommends the following steps, first that we identify lands that cannot sustain such activities as logging, grazing, water development, developed recreation and protect them from such uses. We recommend that fees be imposed for resource extraction and recreation that are comparable to those realized by non-Federal landowners, and at

least recover the cost of offering those resources for sale.

And finally, consider imposing an annual impact fee, a fee based perhaps on the percent of gross profit realized from resource extraction, the size of that fee varying with the severity and the threat to biological diversity and the cost of mitigation of that

threat.

Mr. Chairman, much of the current debate over the Endangered Species Act centers on the impact of the Act on private property rights. Our report demonstrates, though, that about 50 percent of the problem results from misuse of public lands. By eliminating those reverse Federal resource incentives that result in species

endangerment, Congress can go a long way towards resolving endangered species problems without setting foot on the private lands. To make a good deal even better, the cost of such reforms would actually be a reduction in cost to the taxpayers.

Few occasions in life are so good that we can take our cake and eat it too. This is one of them. We urge Congress to act.

Senator GRAHAM [resuming the chair]. Thank you very much, Mr. Olsen.

I extend my appreciation to all the members of this panel, and I apologize for the interruption that we had in the midst of your

presentations.

I would like to ask a question, to which any member of the panel who cares to can respond. That is, focusing on the question of the coordination among Federal agencies, both as it relates to the Endangered Species Act and other acts which impact on similar resources, such as the Forest Management Act and NEPA, what do you consider to be the principal problems with the current coordination of those Federal agencies, and their statutory authority, and what would you recommend that we incorporate in the reauthorization of the Endangered Species Act in order to correct that problem?

Mr. Barry, you had a list of five topics which you thought were particular problems, ranging from consistency to the absence of

adequate flexibility and creativity in solutions.

Mr. BARRY. Certainly one of the things was inter-governmental cooperation. I think some of the actions that Interior has taken in the interagency agreement that was announced today certainly is

a step in the right direction.

I do think that one of the problems I've seen personally, in both the Platte River and the Colorado River, is the Federal agencies stepping all over each other. But when you can get them all to the table and make them sit down and negotiate in the same room, that is very helpful. In fact, we did that on the Upper Colorado River fish recovery program beginning in 1988. All the Federal agencies are there, and nobody was allowed, really, to step away from the table and say, I'm taking my ball and going home.

The one agency that I did note in my testimony that does not seem to be at the table now and needs to be is FERC. FERC is a major player when you're talking about any hydropower facility. Because it has to be licensed by them, and they were not here at the table today, and I don't know where they are. I think they

ought to be at the table.

I guess my recommendation-

Senator GRAHAM. Let me ask a question. I come from a State which does not have much hydroelectric power, so I'm not particularly familiar with that agency. Is their failure to be at the table because they're prohibited from doing it, or it is their practice not

to be participants?

Mr. BARRY. I wish I knew the full answer. I know it's their practice, generally speaking, not to be, you know, I guess they have one other field office, one in California, but by and large, they're in Washington and they were historically involved with rate hearings on Federal projects. But they have now incorporated, I think properly so, some environmental concerns, and as they hear relicensing proceedings, they are tending to impose bypass requirements, in many cases based on Endangered Species Act kinds of data.

But it is almost impossible to get them to come to a meeting or show up at any of these kinds of interagency things. I don't know the reason for that. I'm sorry I don't. If you like, I will see what

I can find out and send it back to you.

I don't want to take the time away from other panelists. My sense is, the sort of mandated interagency cooperation probably ought to be put in the Act and maybe even with a provision that says, for each species or each ecosystem, there ought to be one clear, clearly designated lead agency. That seems to me to be helpful.

Senator GRAHAM. Mr. Brinkmeyer?

Mr. Brinkmeyer. Mr. Chairman, to expand on that, I guess the term we would use would be one-stop consultation. So there is some process with enhanced communication that the consultation process takes place, and it's definitive. Case in point, we had in Idaho last year a Scott salvage timber sale. It was the result of a fire.

The process was held up so long, and finally took some help from the Hill to get the consultation process executed, and now that sale is in the process of being recovered, and the timber is spoiled. That type of lack of communication and follow-through is an example of

what we've had to deal with.

Ms. Noritake. Mr. Chairman, I have a couple of additional comments as well. I think in our opinion, the majority of what needs to happen is not so much change in authority, but proper use of existing authority. Part of that is that at least in our case Forest Service and NMFS should be doing more prelisting conferencing about what can be done before listings occur. We don't see that happening as we think it ought to. That authority exists within the law. But it is not exercised.

The other thing is, we believe that multi-species recovery plans are something that we really ought to take a strong look at, and I think Mr. Kempthorne might agree, if you look at Boundary County, where he's got, I don't know, caribou, grizzly bear, wolf, probably some bull trout coming down the line, that's an ecosystem that's obviously very valuable and we ought to look at how we can

handle all of those things in one fell swoop.

I think the other thing that we're also seeing as far as the Idaho cases are concerned is an increased load for NMFS, for consultation. We've asked whether they need additional funding and personnel to accomplish their duties within the prescribed amount of time. That obviously is a function of Congress as well, and we think that that probably needs to be addressed.

Senator GRAHAM. Any other identifications of particular prob-

lems in terms of interagency coordination?

Mr. LITTLE. In my case, it's the Forest Service and the National Marine Fisheries consulting with one another. It's cumbersome, to be sure. I don't know, I get the impression that this year the lack of response from NMFS might have had to do with just a huge workload. We ran into a problem there.

But it seems like it is, it's cumbersome and it takes forever to get response. If they have 135 days to respond, why then, if they

have questions, they start talking about it close to day 130, and then we have to move on and extend it. It gets, in our business, you don't readily find other places to go with your livestock if they

come along and reject something.

So timely decisions are essential. When we don't have a timely response from them, it puts us in real jeopardy. The other permittee on my forest allotment has elected not to even go on the forest the last 2 years because he feared that at the last minute he would be prevented from going, and he wouldn't have any alternatives.

And that puts a hardship on all of us, because a lot of those costs on that allotment, which is a long ways away from "subsidized" grazing, all fell on one permittee. So it made it real tough on him as well as me. But he said, "I can't stand the threat of them coming 2 weeks before I go on the forest and saying, you can't go, you've got to take your whole investment, your whole livelihood and find someplace else to go, when all other places are taken." And so that's part of the real serious dilemma we deal with when they're hung up.

Senator GRAHAM. Mr. Olsen?

Mr. OLSEN. Mr. Chairman, one or two other thoughts. The land management agencies often have boundaries, particular administrative units that are adjacent to one another. In land management planning, they should consider and be done jointly between agencies the whole ecoregion, rather than looking at administrative unit by administrative unit.

Senator GRAHAM. Senator Kempthorne?

Senator KEMPTHORNE. Mr. Chairman, thank you.

Mr. Brinkmeyer, help us to build some pragmatism into this. You had indicated in your testimony that there were things that local landowners, private citizens, would be willing to do in a partnership role with the Government on the Endangered Species Act. Could you give us some idea, what are the sorts of things that really could be done by citizens to help bring about the Endangered Species Act reform. Are there incentives as to what we could be of-

fering that would help, again, the private citizen?

Mr. Brinkmeyer. With respect to the Forest Service, the communication process in the Forest Service is difficult at best. The grizzly bear plan was put together in their shop and came out for public comment, and at that time, we were aware of the flaws in the process. So I think to address that issue, we have to force, being the industry and through our associations, going out to the specific districts and being involved from the very beginning. That has to take place not only on forest plan revisions, but every other aspect of it.

With respect to incentives and help, one of the matters that's been discussed, and I guess there is, over on the other side, there was some discussion on stewardship contracts, but we have talked to the Forest Service, because there isn't a mechanism now that exists that if there's a road problem or a bridge problem and we through a timber sale contract go ahead and fix that and take care of that and incur that cost, and make it part of the timber sale process. That's one particular aspect that we feel would be beneficial. These matters have to be dealt with on the ground. We can't do it through the present process.

Now, with respect to the grizzly bear, one of the things that opened my eyes is our association recently hired a wildlife biologist. We met specifically with the district and the Forest Service wildlife biologist. I think our industry and our company is going to be doing more of that. Because there's a culture there that we need to understand.

We're going to have to start looking at timber sales and timber harvesting methods through the eyes of biologists. I'm finding that really progressive on our part, but a change that our industry's

going to have to make.

One point, where we're located up in Idaho, we don't have the below cost timber sale problem. We do have a below cost timber sale issue on a district that has the ability to grow 80 million board feet a year, and it only has two up. Then you have a below cost district.

Senator Kempthorne. And also, you have logged, apparently, on both State and Federal lands. Can you give us insight as to, is there a difference with regard to the management and operation?

Mr. Brinkmeyer. Yes, there is. The State lands in the State of Idaho are managed for the endowment. Where we live up in Priest Lake, we have a very unique situation that's considered by the environmental community and the forestry community as a very pristine area. It has been logged over the last 100 years.

There's a 200,000 acre Priest Lake block that's managed by the State. That 200,000 acre block is growing approximately 50 million board feet a year. The harvest averages, because of age class, some-

where between 16 and 20 million board feet a year.

On the Federal side, we have 338,000 acres and we have serious mortality problems in the district because of acreages that were planted in the Civilian Conservation Corps days where they misused, and didn't know it at the time, but used a pine species out of North Dakota. As a result, we have 55,000 acres that have been planted that are dying presently. The Forest Service is trying to figure out a method to deal with that on that district.

So there is, there's a major difference between the two. The State of course is managed for the endowment, for the school system. It

has to be for the highest and best use. Senator KEMPTHORNE. Thank you.

Mr. Little, would you describe for me your experience with the Endangered Species Act consultation process, as it affects the graz-

ing permittee on Federal lands?

Mr. LITTLE. Yes, I'll do the best I can. The background on our allotment is that it was prime spawning habitat, and has been forever, and a lot of uses, and one of the worst was, and when I say worst, it was a disaster that was a natural disaster, but it was a dredge mine blowout that put about a half million yards of sediment in our streams. So suddenly, anything they could do to that stream to make it better was paramount.

So when they passed the forest plan, salmon habitat and recovery were the first thing, and that was the head of the listing. So they immediately went to work on our allotment as the number one allotment on the forest. We were involved in the process, and we found lots of avenues that they wanted to head down that we couldn't do, and as we learned more about what was expected and

what the goal was, why, it gave us a better insight into what we

thought we could do.

So we felt like we did have some input into that process. The dilemma comes down to how much can we do and what our costs are. My costs last year on that forest allotment were \$17.55 per AUM. That's a long way away from "subsidized" grazing. That includes the \$1.86 fee that we paid the Government. But the costs were really high. It's marginal at best.

Our dilemma is, we can't find anyplace else to go, so we've sure tried to stay with it and make it work. The allotment across the valley, the permittee there told me that his costs were up over \$22 an AUM this year, and he thinks that the system's beating, it's become so cumbersome and so many things that they want to do that are of questionable value but the costs are just killing him. He said, "I think I'm going to have to give up, because there's nothing else I can do."

And he paid \$85 an AUM for that permit, and you might say he's got no value in it, but that's the only way he could acquire it, and that's the way the system worked. It has no value now, and he's going to have walk away from it because of the costs.

Senator KEMPTHORNE. Thank you very much.

My time has expired. What I would like to do, again, Mr. Chairman, is if I may submit questions to the members of the panel, and Ms. Noritake, I know, Judy, that you took issue with the argument that the wildfires in the west this summer are catastrophic and a threat to the salmon. So I'd like to pursue that with you, because I think part of your testimony and the material you provided from the biologists I think was based upon the Yellowstone ecosystem.

Ms. NORITAKE. Although I-excuse me-I think that they were

extrapolating it specifically to the fire situations this year.

Senator KEMPTHORNE. Okay. Well, anyway, I would like to look at that.

Ms. NORITAKE. I would be happy to give that to you.

Senator KEMPTHORNE. Are you a Vandal?

Ms. NORITAKE. Yes.

Senator KEMPTHORNE. Good. Where did you live on campus?

Ms. NORITAKE. In one of the dorms in the—now, you're going make me remember, that's a long time ago, I can't even—

Senator KEMPTHORNE. Well, it's not that long ago.

[Laughter.]

Ms. NORITAKE. I hate to say how long ago that was.

Senator KEMPTHORNE. I lived in the dorms also.

Ms. NORITAKE. I was in Houston Hall.

Senator Kempthorne. Yes, I was in Wallace Complex.

Ms. NORITAKE. Yes, right, same bad food.

[Laughter.]

Senator KEMPTHORNE. Mr. Chairman, thank you very much. If I may, I'd like to make the report that I've been referencing by Victor Kazinski part of the record, if I may.

Senator GRAHAM. It shall be included, as well as the full program

of the homecoming of the University of Idaho.

[Laughter.]

[The report referred to follows:]

### DR Victor Kaczynski Wildfire Impacts on Stream Habitats and Salmonids

VK: I'm going to talk today about forest health, wildfire, and fisheries impacts. Forest health really affects the probability of wildfire and it affects the area of coverage, the frequency and the intensity of wildfire which has been exacerbated by all of the factors that you have been discussing today. There's a wealth of information on wildfire and stream impacts that primarily resides at the district level of the national forests. I started to gather up that information and quickly determined that it would be impossible to ever present all of this information to you. So, in about mid-stream I switched gears and decided that it would be helpful to present what happens in wildfires and how this affects fish habitat. And if I could have the first slide please. We see that, as a generality, wildfires really affect fish habitat in three ways: increased storm run-off, increased sediment and debris, and decreased vegetation cover.

Getting into each one of these individually, storm run-off is very dynamic. It's affected by precipitation characteristics, vegetation cover, soil mantle capacity (which includes infiltration, storage, and transmission), and here the intensity of wildfire really affects us very much, and then, vegetation comes in again and affects evapotranspiration, and then topography. In a wildfire, we have the destruction of the vegetation cover and the root systems, which leads to increased erosion and slope failure rates. The wildfire can also destroy the upper organic soil horizon which impacts the infiltration and storage functions. This loss of organic soil may create the hydro-phobic soils that you were referred to earlier. It increases real surface erosion and surface run-off, and it may decrease the summer flow

because of loss of water storage function in the soil mantle. Loss of summer flow increases stream temperatures. When vegetation is also destroyed, we also loose another set of functions, associated with decreases in the evapotranspiration rate. This increases stream flows and peak run-off events, and it may shorten the spring run-off season by heightening those storm run-offs in the spring season. Thus, you have a strong pulse of flood water in the spring, and not as much water in the summer.

If you look at your sediment and debris impacts you have a pulse of small to large organic debris, a pulse of sediment to boulder size, a pulse of nutrients including ammonia nitrogen, and a pulse of biochemical oxygen demand. And, in addition to that, you can also have quite a bit of increase in stream temperature. Increases of several degrees celsius have been recorded in many of these wildfires, which can lead to direct death, stress, and vulnerability to diseases. Now let's talk about these sediment and debris impacts. Sediment and ash particles can clog and irritate fish gill tissue and this can cause direct death or increase disease. They smother the spawning gravels, which decreases the oxygen permeability and the flow of water through these gravels, which increases inter-gravel mortalities of eggs and alevins. These increased sediments decrease pool volumes which decreases rearing and nursery areas. You have this large BOD pulse which can deplete the dissolved oxygen to lethal levels. You have an increase in nutrients which can increase stream photosynthesis, which for a couple of years can actually be a beneficial effect. And you have a large pulse of medium to large debris which can increase stream complexity for a short to a long period of time.

Getting into vegetation loss impacts, other than the losses on the hydrology which we previously discussed, you have the loss of canopy and shade, which increases summer stream temperatures, decreases winter stream temperatures, increases the photosynthetic rate, but decreases the input of needles, leaves, etc., which are a large part of the organic food chain in streams. These vegetation losses can cause long term large woody debris recruitment shortages which can lead to potential long term stream habitat simplification.

Now, I'd like to go to some examples and I borrowed the first example — I don't know if that can be focused any more — but this is from the Tillimook burn of about 500 square miles. Talk about a very large wildfire and its stream impacts. You can see those peaks of erosion which came about from the wildfire and salvage logging. If you multiply 500 square miles by the various areas under the curve you'll see the phenomenal amount of sediment that came off these very large wildfires in the Tillimook basin.

Going on now, I'm going to go into the Tanner Gulch fire in the Upper Grande

Ronde River basin. This is a scene after the fire, where you see helicopter seeding going on
to try to prevent the sediment run-off, which unfortunately already has occurred. We'll get
into these sediment runoff impacts a little closer through a series of slides. You'll see some
of the impacts that have occurred with a very high intensity burn: the removal of the organic
soil layers, and the sediment and debris which is washed into these small tributaries. You
see the sediment and debris loading which has occurred. And the channel clogging which is
occurring, and finally, you start to get into these very massive build-ups of debris. And
here, you see the result: sluice out down to the bedrock. What we had was two sluice outs

of very small, unnamed tributaries in the Tanner Gulch which led to a very major debris torrent in the Grande Ronde River. This debris torrent was measured 36 miles down stream, with phenomenal increases in sediment loads temperature increases, and oxygen depletions. A total fish kill in that 36 mile stretch of all fish occurred, including the endangered Spring Chinook Salmon of the Snake River strain. All of the adults were lost in this fire runoff event. There's one more picture of the second sluice out there. All of the 1989 adults were lost from this debris torrent that went down the Upper Grande Ronde River. All of the fry from the previous year's spawning (in 1988) were lost. It is calculated that half of the smolts from the 1987 spawning were lost due to this fire and debris torrent. So, we lost all of '89, all of '88, half of '87, and then we had the impairment on the spawning that occurred in the 1990 and 1991 broods. I was up there in 1993 and you still had excessive sediments there in the spawning areas.

So, let's go to a diagram now of the Spring Chinook habitat in the Upper Grand Ronde basin. You have to know a little bit about the Spring Chinook, where they spawn. They spawn in the unconstrained flood plain reaches. And in most of the areas in northeastern Oregon that I'm familiar with, those flood plain reaches are actually private ranch and agricultural land, and the federal forest is above those areas. On this slide, you can see that all of these tributaries, Tanner Gulch is there etc., are above this prime spawning reach. And two small sluice outs in Tanner Gulch caused the entire extinction of the several year classes of that Spring Chinook Salmon stock.

This struck me as the single most important impacting forest factor available to affect

these endangered fish species. And Steve Mealy came to a similar conclusion with Bull Trout, apparently, in the Boise National Forest. There's no forest practice, (grazing, road construction, timber harvest) that compares with this wildfire probability of extinction of these fish that we're trying to protect. This is the very reason for Pacfish in the federal forest planning process - to protect these fish. And yet, these conditions that are extant on the forest lead to this high degree of probability of extinction of these fish. It's a paradox. A very striking paradox. I don't think that this has received enough attention in the federal forest planning, the great degree of fish vulnerability that we have today with poor forest health and wildfire. This same type of vulnerability exists in the Wallowa River system. It exists in the Umatilla River system, where we're trying to replace our Spring Chinook salmon which had been completely exterminated previously. And, and I'm sure those fish blologists that are out in the audience are familiar with similar situations in the Idaho national forests and the Washington national forests. We probably have many very similar situations where wildfires in small tributary basins can exacerbate the situation and make it worse.

Finally, I have two additional slides. We're going to take a look at the northern portion of the Wallowa-Whitman National Forest. We're going to look at a little history of forest fire record from 1986 through 1993, eight years. In terms of the federal forest, you have forest fires there that are covering about twenty percent of that area in eight years. In other words, if this rate of fire during this eight year period continues, it suggests that you're going to get forest replacement of the Upper Wallowa-Whitman, one-half of the Wallowa-Whitman National Forest, in forty years. In other words, we have a 100% probability of wildfire-stream impacts in 40 years with present forest health conditions. So, the probability of risk to these fish populations of Spring Chinook Salmon and Steelhead Trout and Bull Trout that we're trying to save is very real. And that concludes my talk. Thank you.

## WILDFIRE-FISH HABITAT IMPACTS

- Increased Storm Runoff
- Increased Sediment and Debris
- Decreased Vegetation Cover

### STORM RUNOFF IS DYNAMIC

- Precipitation Characteristics
- Vegetation Cover
- Soil Mantle Capacity
  - Infiltration
    - Storage
- Transmission
- Evapotranspiration
- Topography

# FIRE IMPACTS ON STORM RUNOFF

- Destroys Vegetative Cover and Root Systems
  - Increases erosion and slope failure rates
- Can Destroy Upper Organic Soil Horizon
- Impacts infiltration and storage functions
- May create hydrophobic soils
- Increases rill erosion and surface runoff
- May decrease summer flows
- Vegetation Destroyed
- Decreases evapotranspiration losses
- increases stream flows, peak runoff events
  - May shorten spring runoff season

# INCREASED SEDIMENT AND DEBRIS

- Pulse of Small to Large Organic Debris
- Pulse of Sediment (to boulders)
- Pulse of Nutrients Including Ammonia-Nitrogen
- Pulse of BOD

## SEDIMENT AND DEBRIS IMPACTS

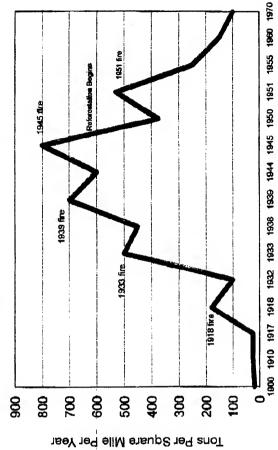
- Sediment Particles Can Seriously Irritate Fish Gill Tissues, Even Clog; Potential Direct Death
- Smother Spawning Gravels
- Decrease Pool Volume
- Large BOD Pulse Can Deplete DO To Lethal evels
- Increased Nutrients Can Increase Stream **Photosynthesis**
- Can Increase Stream Complexity Long Term Large Pulse of Medium to Large Debris

### **VEGETATION LOSS IMPACTS**

- Loss of Canopy and Shade
- -Increased summer stream temperatures -Decreased input of leaves, needles, etc. -Decreased winter stream temperatures -Increased photosynthesis rate
- May Cause Long Term LWD Recruitment Shortage
- -Potential long term stream habitat simplification

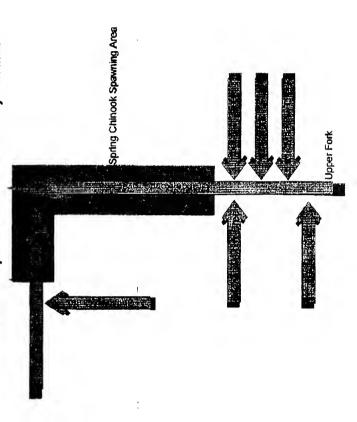
SEDIMENT ESTIMATES FROM WILDFIRES AND SALVAGE LOGGING IN THE TILLAMOOK BASIN





Data Source: USDA, SCS 1978)

Diagram of Upper Grande Ronde River Showing Vulnerability of Spring Chinook Habitat to Upstream Forested Tributary Wildfires



Senator GRAHAM. I'd like to ask a few more questions on the special role of public lands in an effort to deal with overall habitat conservation and species protection. I was interested in the comment that the publicly-owned forest land in Idaho operates under a requirement of maximizing its return to the school fund, is that correct?

Mr. Brinkmeyer. That's correct. The State of Idaho endowment

lands are for the benefit of the school districts.

Senator GRAHAM. I spent some time in the State of Washington earlier this year to try to learn something about the situation on the Olympic Peninsula. That I think is also the policy of the State lands in the State of Washington.

Using that as a specific example, if you have one block of land within an area which are required to be used for maximum benefit to a particular purpose, does that indicate that Federal lands should become the area in which there were greater restraints on use and greater protectionist policies in order to be able to serve the function of habitat protection and species protection, given the fact that other lands are obligated to be more intensive in their use?

Mr. BRINKMEYER. Well, since we're going to stay on public lands and not get into private lands, I won't talk about the private land issue. We have, one of the discussions going on now, and the State now is sensitive to it, is because of the species on the Federal side, and there's only a line on the map in the ownership between the two interests.

More importantly, and one of the issues that's been very sensitive about the grizzly bear up in that area is because of the situation in Canada, where the range is 100 miles, and the area that's being suggested is 20 miles from the border. That's been an issue

with the local people.

The thing in working together, I think they have to be equal on all lands. If we have the common sense approach that I would like to see, we'd have to take care of what goes on on our own lands. To me, there's no difference. I know there may be a difference in our industry, but we also know that our State lands are not detrimental to any species. They are working towards being on the leading edge, if you will, in working on fish.

We have a situation that happened, if I may take a minute, on the State lands 2 years ago. The State legislature had a law, has a law about outstanding resource waters. There was a nomination by environmental groups to nominate Priest Lake as an outstanding resource water. The effect of the nomination would have meant that there would be no non-point source pollution, which means, no

logging roads would be built.

That was not what the law was intended for. But the interpretation could be made that there would be restrictions in that regard.

So they went back to the legislature, changed it, and put forth a study, which is excellent, to determine the science and what the quality of the lake is. What's interesting is, we're 2 years into the study, and so far it appears that the issue is not logging and what's gone on up at the lake for the last 100 years. It's a people issue. There, of course, we can get into what's good science, what's bad science and so forth.

But the State lands in addition to timber are also recreationally, have to be managed for the highest and best use. So the lessees of the waterfront property have the same concerns that forest products people have, because it has to be for the highest and best use, and rates are set accordingly.

Senator Graham. Yes. Mr. Barry?

Mr. BARRY. A short comment on that same subject.

In my prior life, I was in the Governor's cabinet in Colorado, in the Department of Natural Resources and the State land board was under me. Through that, I became aware of the fact that many of these western State land agencies have single purposes of the management of land, and it's for the school endowment funds.

My opinion, and this is not the Western Urban Water Coalition speaking, just me, those single purpose objectives of the State land boards throughout the west are too narrowly focused. That is an anachronism from 100 years ago when the purpose of the land was to provide money for schools. We now have lots of other ways to

provide money for schools.

It seems to me a more modern approach, and maybe Congress can help, would be to suggest that the State lands be managed for multiple purposes, not sole economic development purposes. It leads to a lot of strife on a number of different fronts. And my view, as the head of the department, was, you could get more creative and more flexible land management if you weren't driven by the sole purpose of making money out of it.

Now, this is not just an ESA issue, but it goes to the heart of a lot of the testimony here. Backing up for a moment, what's the primary purpose of public lands, or should public lands be the place of solution for endangered species, I think the answer is, they will bear a disproportionate burden, and I think properly so. If you can

get State school lands into that mix, that's some help.

I don't want to see the Federal agencies impose solutions on Federal lands without consideration for the off-site effects if that's a major problem. The Forest Service has recently in Colorado suggested that 30 percent of the yield of the City of Boulder's water system be devoted to endangered species purposes, and that's because the diversion for that water is in the national forest. It's simply not possible for the city to comply with that.

So while the Federal lands will bear a disproportionate burden,

it needs to be done with some consideration for off-site effects.

Senator Graham. Mr. Olsen?

Mr. Olsen. Senator, if I may pick up on Mr. Barry's point. I think it's really talking about an opportunity that the interaction between various landowners management, and in particular watershed, if the cumulative effects of those management activities are not taken into account, ultimately it does place a greater burden on Federal lands, simply because the Federal lands, under the laws that govern their management, are required to maintain viable populations of species and consider other effects.

The opportunity, it seems to me, is to find ways for the various landowning groups, private landowners, State landowners and Federal, to find ways to work together within ecosystems to come to solutions and consider the full range of impacts, consider the full

range of species that live in that system.

Senator GRAHAM. Yes, Mr. Little?

Mr. LITTLE. Yes, the only comment I'd like to make is, in Idaho, from the forest standpoint, I fear if we manage the State forests like we did the Federal that we may be a step backwards in some of the forest health, and possibly even water quality health. In my lower grazing country, I have mixed ownership lands, Federal, State and private. We all run them under one system.

And the ownership property lines aren't a consideration. It's the best use of the resource for wildlife habitat, water distribution and everything. I think that this interaction is vital from a grazing standpoint, and it is not healthy to say that we're going to do something completely different because the boundary line, the homesteader homesteaded this wet place, but he couldn't figure out a way to make a living on the dry side, so he didn't do it.

I think if we start delineating right at these property lines on a lot of these issues, a lot of resources are going to suffer as a result of it. Because obviously, the settlement of the west was based on

the availability of water. So that adds to the mix.

Senator GRAHAM. Ladies and gentlemen, we appreciate very much your making the effort, as I indicated earlier, a number of you made a very significant effort to be here today. There may be some additional questions by members of the committee. We would appreciate reserving the opportunity to submit those for subsequent response.

I want to thank this panel, as well as the previous panels, for their participation and contribution. This will be the last hearing

on this subject for this session of Congress.

We do intend to hold one or more field hearings over the next few months. We have had an invitation from Senator Kempthorne to have one of those hearings in Idaho. Senator Packwood has invited us to come to Oregon. So I think that we will hold a hearing in the Northwest, and look forward to getting on the ground and learning some more about these issues.

Thank you very much. The meeting is adjourned.

[Whereupon, at 1:00 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record follow:]

STATEMENT OF HON. BOB PACKWOOD, U.S. SENATOR FROM THE STATE OF OREGON

Mr. Chairman, I am pleased to have this opportunity to testify today on an issue of great concern to me and to the people of my State—the Endangered Species Act.

The Endangered Species Act in its current form is an Act gone awry and is wreaking havoc on our communities, particularly in the Pacific Northwest, but increasingly nationwide.

It is cast in concrete. It is a bureaucratic nightmare. It does not recognize the importance to this country of the wise use of our natural resources.

We are beginning to see a public backlash against even legitimate environmental activities due to the heavy-handed approach of the Endangered Species Act as it is currently written.

In the Northwest alone, since the spotted owl was listed as threatened in 1990, millions of acres of Federal timberland and thousands of private acres have been set aside for owls. Estimates of the number of jobs that will be lost as a result of this action range anywhere from 35,000 to 150,000.

To add insult to injury, Oregonians are now also feeling the impacts of salmon listings under the Endangered Species Act. These listings promise to be even more devastating than that of the owl.

Further exacerbating the situation is the serious forest health and wildfire problem in the Pacific Northwest. Everyone has seen the daily news reports that show the loss in lives and personal property caused by this year's fires in the west, one of the worst fire seasons ever.

These wildfires have brought home to the public and policymakers the urgency of the need to take action.

Environmentalists' appeals and lawsuits have stopped any volume of salvage logging and thinning from occurring. Already-funded salvage and thinning programs have been hamstrung by environmental challenges.

Environmental groups advocate letting nature do the work. But, if we do not start managing our forests through a combination of salvage logging, reducing fuel loads, and thinning densely stocked stands, the 1994 fire season will become the norm. We cannot, in my opinion, simply step back and wait for "nature" to take its course.

Environmentalists attack salvage and thinning proposals as an attempt to sidestep environmental laws. Mr. Chairman, if our environmental laws are being so interpreted, then it is time to change those laws.

The Endangered Species Act goes far beyond its original stated objective and, as a result, has created regional and national problems never envisioned by the Congress

Little did we know when we passed the Endangered Species Act back in 1973 the direction it would take and how it would be used as a tool by environmentalists to shut down entire regions. The Endangered Species Act is today being applied in a manner far beyond what any of us envisioned when we wrote it 20 years ago.

It was originally conceived as a law to ensure the survival of species threatened with or in danger of extinction because of individual actions such as roads, sewer systems, dams and other such projects, on a site-specific, species-specific basis.

Today the Endangered Species Act is being applied across entire States, across entire regions. The result is that it now affects millions upon millions of acres of publicly and privately owned land, tens of thousands of human beings and hundreds of rural communities.

According to Edward O. Wilson, a renowned entomologist at Harvard, there may be something on the order of 100 million species, of which only 1.4 million have been named. How many billions of dollars are we willing to spend attempting to save fungi, insects and bacteria we've never heard of and for which there may be little or no chance of recovery in any case.

The Federal Government has already spent hundreds of millions of dollars and, according to the U.S. Department of the Interior, will have to spend billions more for the recovery of currently listed and candidate species. Additional indirect costs imposed on American citizens already potentially reach into the billions.

Mr. Chairman, for years we considered the needs of humans as though nothing else mattered. Now, under the Endangered Species Act, we are attempting to consider the needs of fish, wildlife and plants as though nothing else matters.

Both policies are short-sighted and flawed.

We need a process to protect plants and animals which recognizes legitimate human needs. The present Endangered Species Act does not achieve this balance. That is why last year I joined Senators Shelby, Gorton and others in introducing legislation to bring balance to the Endangered Species Act, to require that social and economic impacts be taken into account when listing a species.

Mr. Chairman, I support the original intent of the Endangered Species Act. It is not my goal to abandon our national commitment to the protection of endangered species. However, I believe the Act can and should do a better job of balancing jobs and economic opportunity with species protection. All I am asking is that the Endangered Species Act be amended so that the decision to protect a species is a balanced decision and not one based solely on science to the exclusion of all other factors. We all have ideas about how to achieve that balance.

While we may have different ideas about how to reauthorize this Act, I think we can all agree that reform is badly needed. The time is ripe to enact meaningful re-

form, and I urge my colleagues to work with us in the months ahead to make the necessary changes which will permit the consideration of economic factors and ensure that humans are once again included in the equation.

Mr. Chairman, in closing I would like to renew my request that your committee hold a field hearing in my state of Oregon on the reauthorization of the Endangered Species Act. In light of the ongoing crisis in the Pacific Northwest, it is clearly appropriate that a field hearing be held in Oregon, one of the States most severely impacted by the timber/spotted owl and salmon crises.

After 5 years of sharp cutbacks in the harvest of public timber across Oregon, there is still no end in sight to the free fall in Oregon's timber industry. Under President Clinton's plan for breaking the logiam over the spotted owl and as a result of injunctions, timber harvest on national forests is at a virtual standstill—one-fifth of the levels during the 1980s.

The region has been devastated. Communities and families are suffering. The

time has come to bring balance to our decisions to protect wildlife.

The people of my State have first-hand knowledge of the effects of the Endangered Species Act and are uniquely qualified to contribute to the debate over what changes are needed in this law run amok.

Again, thank you for this opportunity to testify. I encourage your committee to take a hard look at some of the unintended consequences of the Endangered Species Act and listen to those who have been directly and adversely impacted by this well-intentioned, but unworkable, law.

### STATEMENT OF ROBERT P. DAVISON, DEPUTY ASSISTANT SECRETARY FOR FISH AND WILDLIFE AND PARKS, DEPARTMENT OF THE INTERIOR

Thank you for the opportunity to be here today to discuss several of the programs of the U.S. Fish and Wildlife Service (Service) for endangered species conservation on public lands.

At no time has human influence on the environment been greater than today as we near the end of the 20th century. Rapid urbanization, the threat of contamination of air and water supplies, and increasing demand for outdoor recreation are just a few of the threats to species and ecosystems.

Many plant and animal species like the desert pupfish have very specialized habitat requirements; others, like the Indigo snake, have been directly exploited for commercial profit. Endangered mussels suffer from water quality degradation and depletion of their host fish species. Species like the brown pelican, the peregrine falcon, and the bald eagle are successfully fighting well-documented struggles against polluted environments. Exotic species are causing declines in other species, such as the endangered plants and forest birds in Hawaii and freshwater fishes across the nation.

The Endangered Species Act (ESA) established a strong leadership role for the Federal Government in the conservation of species at risk. The Service and the National Marine Fisheries Service (NMFS) have primary responsibility for administering the ESA. In addition to administering the ESA, the Service is committed to recovering imperiled resources on its public trust lands and through use of its existing programs and authorities.

The first area of focus for the endangered species program as it nears the 21st century is what we in the Fish and Wildlife Service refer to as candidate conservation or prelisting recovery. This is the conservation of species that have been identified as candidates for listing. The goal of this program is to reduce the number of species that will need listing. These activities are designed to reduce the threats facing candidate species and can be as simple as erecting a fence to protect a breeding colony of bats or as challenging as development of an interagency management plan.

In January of this year, the Service, along with the NMFS, Forest Service, Bureau of Land Management, and National Park Service entered into a memorandum of understanding regarding the conservation of candidate species. The purpose is to establish a general framework for cooperation and participation among the cooperators in the conservation of species that are declining and may require listing under the ESA.

The Service provides assistance to many other Federal agencies to ensure that prelisting conservation activities are vigorously pursued on all public lands.

If a species is listed under the ESA, the Service is responsible for developing a recovery plan. Recovery is the cornerstone and ultimate goal of the endangered species program. The ESA defines recovery as the process by which the decline of listed species is reversed to the point where they are self-sustaining components of their ecosystem and no longer require protection under the ESA. Primary recovery efforts generally are aimed at stabilizing or reversing the deterioration of a species' habitat or the decline in the species numbers and then restoring it to a condition where it is likely to survive over the long-term. The tools of recovery are numerous and include reintroductions of species into formerly occupied habitat, land acquisition, captive propagation, habitat protection, research, and public and landowner education.

Recovery activities on public lands are not limited to the implementation of recovery plans. All Federal agencies are directed by section 7(a)(1) of the ESA to use their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of threatened and endangered species. Examples of these programs are the Bureau of Land Management's "Bring Back the Natives" program and the

Forest Service's "Every Species Counts" initiative.

The Service, through our Habitat Conservation program, provides expert biological advice to other Federal agencies, States, industry, and the public in promoting the conservation and enhancement of fish and wildlife habitat in connection with land and water development and other land uses.

The habitat conservation program allows the Service to strengthen its partnership role with other Federal agencies and the private sector through Partners in Flight, Partners in Wildlife, early project planning, mitigation planning, wetlands mapping, technical assistance, and the development and distribution of educational information. It is this type of coordination effort that strengthens the Service's ability to recover species on public lands.

The Service has helped develop and implement a multi-agency memorandum of understanding establishing a Federal Plant Conservation Committee. The committee coordinates the ranking and implementation of conservation actions, information exchanges, education/public outreach, and research on native plants and plant habitats of the United States. The memorandum was signed on May 25, 1994, by seven agencies within the Departments of the Interior and Agriculture. The strategy calls for the creation of a public/private partnership to mobilize support throughout North America.

In June, the Service and NMFS signed six joint policy directives to improve the ESA's effectiveness while making it easier for Americans to understand the law and its requirements. These changes in the way the Federal Government administers the ESA will make the ESA more effective in recovering listed species.

A key element of the Administration's June initiative was the formation of a Federal Interagency Working Group. The purpose of the Working Group is to identify, develop and implement reforms that streamline and improve the performance of the ESA. At the request of the White House, Federal agencies on the Working Group are identifying both problems and potential solutions related to the implementation of the ESA. Our efforts to date have resulted in the development of a new Memorandum of Understanding (MOU) in which the other agencies and ourselves have agreed to establish a general framework for cooperation and participation in the exercise of our affirmative conservation responsibilities under the ESA.

As a party to the MOU, the Service agrees throughout our programs to:

1. Use our authorities to further the purposes of the ESA by carrying out programs for the conservation of federally listed species, including implementing appropriate recovery actions that are identified in recovery plans;

2. Identify opportunities to conserve federally listed species and the ecosystems upon which those species depend within our existing programs or

authorities;

3. Determine whether our respective planning processes effectively help conserve threatened and endangered ecosystems and the ecosystems upon which those species depend; and

4. Use existing programs, or establish a program, to evaluate, recognize, and reward the performance of employees who are responsible for implementing our programs to conserve or recover listed species or the ecosystems upon which

they depend.

These common goals will be accomplished through our participation in both national and regional interagency recovery teams or working groups. These national and regional groups will also identify and seek to resolve issues associated with interagency consultations pursuant to section 7(a)(2) of the ESA.

All this will be accomplished by the Service and other cooperators with the appropriate involvement of the public, States, tribal and local governments. On a national level, the first such public involvement activities are already being planned for mid-

October.

We believe, by working together, we can identify additional opportunities and implement actions to help resolve the intractable issues we face today.

### NATIONAL WILDLIFE REFUGE SYSTEM

The National Wildlife Refuge System (Refuge System), the land base for the Service, plays a key role in endangered species conservation. Seventy years before the 1973 ESA was passed, the first national wildlife refuge was established by President Theodore Roosevelt. Pelican Island National Wildlife Refuge in Florida, was the forerunner of a system of lands that continues to expand and face a multitude of challenges and opportunities. As we approach the 100th anniversary of the Refuge System, we are reflecting on its history and are examining its potential for the conservation of threatened or endangered species.

Approximately one-quarter (217) of the 895 species currently listed and proposed to be listed in the United States are found on wildlife refuges. For listed species the breakdown is: 40 mammals, 55 birds, 19 reptiles, 2 amphibians, 28 fish, 7 insects, 6 clams, 1 crayfish, 1 snail, and 58 plants. The significance of the refuge's role does not lie in numbers, however, but in potential. Refuges are legally and administratively required to conserve endangered and threatened species. Of prime importance is the fact that what happens on refuge lands can be controlled. When listed species are documented on refuges, quick and effective conservation measures

can be implemented.

An enormous variety of habitats is represented within the 91 million acres of refuge land that stretches across the Nation. With over 500 refuge units, most major ecosystems within North America, the Caribbean and the Pacific islands—from Alaska to Puerto Rico, the Virgin Islands to Samoa—are represented. Thirty-one million acres of refuge land are vital wetlands. Vast freshwater marshes, swamps, bogs, lakes, ponds, streams, rivers, coastal and estuarine systems are woven through the Refuge System. Terrestrial habitat includes prairie grasslands, desert sands, Arctic perennial snow and ice, and the many forest types encompassing 16 million acres. Forests include the cool northern coniferous forests, the deciduous eastern hardwoods, rich bottomland hardwood forests, subtropical broadleaf evergreen, and Southern longleaf pine.

Although the Refuge System has long been associated with management of water-fowl, it should now be obvious that these rich lands offer much more. In addition to game species, refuges provide vital migratory, breeding, and wintering areas for many nongame species. Millions of shorebirds use refuge land along with wading birds, neotropical migrants, and raptors. Plants, fish, small mammals and a variety of reptiles and amphibians are among other nongame resources found on refuges. Many of the latter are candidate species whose protection on refuges may deter the

need for their listing as endangered or threatened species.

The extent of refuge activities with endangered species was evaluated during a 1990 survey of refuges compiled for Refuges 2003. Refuges 2003 is a comprehensive management plan that is being prepared to help guide the management of the Refuges System over the next decade. The survey found that of the 400 refuges which had documented the occurrence of a listed species, 356 had developed various inventory, monitoring, or active management strategies. Conservation measures varied widely, depending on the refuge and the number of endangered species present. For example, Merritt Island Refuge in Florida must manage at least 15 listed species,

including: bald eagle, green and loggerhead sea turtles, manatee, wood stork, Atlantic salt marsh snake, roseate tern, and 9 candidate plants. All this is done within the backdrop of the NASA space program.

Management practices on refuges range from basic protection to more creative endeavors. Programs to protect bald eagle nesting trees are common. Control of invasive nonindigenous species, such as removal of Australian pine on sea turtle beaches in Florida, is crucial to maintaining habitat integrity. Prescribed fire is a useful and frequently employed tool for maintaining the habitat of species like the red-cockaded woodpecker, Attwater's prairie chicken and Kirtland's Warbler.

Restriction of human access can be crucial to many species. Both foot and vehicular traffic have contributed to the decline of many species. Limiting public use on piping plover beaches is proving effective in the recovery of this shorebird. Control of vehicular traffic on Refuges for protecting species whose habitat runs in proximity to major thoroughfares is extremely important. For example, mortalities in the diminutive Key deer, the American crocodile and the Florida panther due to car fatalities along Route 1 in south Florida have severely impacted these species.

Refuges manipulate water regimes to meet the needs of species like the Florida snail kite or the western prairie fringed orchid. Managing predation, including the impact of raccoons on sea turtles' beaches, can be an important activity on refuges. Restoration of native pine habitat is important for gopher tortoises and indigo snakes in the South, and restoration of oak Savannah on Necedah Refuge, Wisconsin will contribute to the success of the Karner blue butterfly. Cave-dependent species like Indiana and gray bats or the Ozark cave fish profit from refuge management and off-refuge easements from willing sellers for the protection of their unique cave ecosystems. Management for these creatures must include limiting access, often by cave-gating as well as maintaining the health of the surrounding watersheds.

Section 6 of the ESA encourages cooperation with State wildlife agencies. Through Cooperative Agreements with the Service, States may acquire funds for endangered species activities. This often provides interesting opportunities for refuges and other Service offices to work directly with State programs. The Florida Panther project is an example of this type of cooperative effort with the State of Florida. Grant-in-aid monies have contributed to the Florida panther recovery program in the Florida Game and Freshwater Fish Commission for several years. Because the panther crosses so many jurisdictions, an interagency committee was formed to maintain a dialogue between diverse groups. In addition, the Service employs a full-time Florida panther coordinator. Of great significance, however, was the acquisition of the Florida Panther National Wildlife Refuge in 1989. The refuge was established to protect a key portion of panther habitat. Radio telemetry studies conducted by the State since 1981 showed that the 25,000 acres acquired for the refuge has the greatest density of panther activity of any area within the currently occupied range.

Land acquisition specifically for species like the Florida panther has become an extremely valuable part of endangered species conservation. The ESA authorizes land purchased for endangered species conservation. Fifty-eight refuges have been acquired for endangered species. These include National Key Deer, Florida; Crystal River, Florida (Manatee); Attwater Prairie Chicken, Texas; Mississippi Sandhill Crane, Mississippi; Kirtland's Warbler, Michigan; Tiajuana Slough, California (Light-footed clapper Rail); Buenos Aires, Arizona (Masked Bobwhite quail); and Archie Carr, Florida (Green and Loggerhead Sea turtles).

Many refuge acquisitions protect several listed species. For example, in 1988 Congress appropriated money for initial funding of the Sacramento River Refuge in California which provides habitat for the valley elderberry longhorn beetle, the bald eagle and the least Bell's vireo. In 1993, funding was approved for Balcones Canyonlands National Wildlife Refuge in Texas for conservation of the black-capped vireo and the golden-cheeked warbler. Wetland acquisitions are also important to listed species. The acquisition of Pinhook Swamp in Florida provides an important habitat corridor between Oseola National Forest and Okeefenokee National Wildlife Refuge, potentially benefiting several species including the red-cockaded woodpecker. A new land acquisition category for biological diversity was added in 1992.

This focuses on communities adding yet another aspect of protection for biological resources.

Innovative technologies are also being employed on refuge land. The 77 million acres of land managed by the Service in Alaska are part of a new Geographic Information System (GIS). This will assess available and potential listed species@ habitats and eventually lead to more efficient coordination of the activities of fishermen, hunters, subsistence users, and their relation to endangered species. Minnesota Valley NWR has used GIS to relocate hiking trails away from the zone of influence around eagle nests and into habitat more suitable for trail development. They are also inventorying and monitoring the health of sensitive habitats. The Service's Branch of Fire Management is using mapping software to spatially manage national fire information including the effects of fire and fire suppression on endangered species management.

Seventeen refuges have reintroduced listed species. In the Southeast, the red wolf is back in the wild after being declared extinct in its historic range. An innovative experimental release program on Cape Romain National Wildlife Refuge in South Carolina in the early 1970's spawned the current red wolf recovery effort that uses the experimental population authority under the ESA. Today red wolves roam wild on several refuges including Alligator National Wildlife River Refuge in North Carolina. In the West, introduction of an experimental population of black-footed ferrets is proposed for the UL Bend section of the Charles M. Russell National Wildlife Refuge in Montana.

Refuges are concerned with the health of the habitats under their trust. The Service's contaminant program has been very effective in dealing with contaminant issues that might impact endangered species. The tragedy of the brown pelican and peregrine falcon has taught a significant lesson in the chronic and acute effects of pesticides.

Environmental education programs on refuges enhance appreciation of refuge wildlife, particularly endangered species. Environmental education integrates environmental concepts into formal educational activities. Outdoor classrooms and indoor laboratories are particularly useful in urban settings. Refuges like Great Swamp, in New Jersey, and San Francisco Bay in California have strong urban programs. The value of public outreach to conservation in general cannot be overstated. Nor can the statistics which show that nonconsumptive use of public lands is growing rapidly.

Viewing wildlife is significant to any outdoor experience. In 1991, the Refuge System joined with 13 other agencies and organizations to promote the Watchable Wildlife Program. Watchable Wildlife includes enjoyment of viewing game, nongame and endangered species. The thrill of seeing these species in their natural habitat goes a long way to foster public interest.

### FISHERIES PROGRAM

Public lands and waters are critically important for the restoration of threatened and endangered fish species. Fish depend on suitable aquatic habitats to survive and public lands often provide an excellent source of these aquatic habitats.

To facilitate the restoration of threatened and endangered fish species, the Service has developed cooperative agreements with Federal agencies and State and Tribal governments. The agreements allow us to work together to restore threatened and endangered species on public and Tribal lands. The Service is currently involved with the restoration of threatened and endangered fish on lands managed by the U.S. Forest Service, Bureau of Land Management, National Park Service, and Tribes. The value of these lands to the recovery of threatened and endangered fish can not be overestimated.

Captive propagation, through the National Fish Hatchery System, has proven to be a very useful tool in assisting with recovery efforts of threatened and endangered fish. Captive propagation has been used successfully to reverse the decline of several listed species, for example the Greenback cutthroat trout.

Greenback cutthroat trout are native to the east slope of the Rocky Mountains, primarily in Colorado. They were originally listed as endangered in 1967 and were reclassified as threatened in 1978. At the time of their original listing, only two

small populations were known to exist. Declines were caused primarily by competition, predation, and hybridization by non-native fish.

Recovery efforts began in 1970 in Rocky Mountain National Park. Using the remaining adult populations, the Service established adult broodstock in several hatcheries to produce fry and fingerlings for reintroduction. At the same time, nonnative fish were removed from lakes and streams to eliminate the potential for competition and predation. Once free of non-native fish, lakes and streams throughout the Park were stocked with greenback cutthroat fry and fingerlings.

The stocked fish established themselves and reproduced successfully. By 1992, greenback cutthroat trout were restored to over 40 lakes and streams in and around the Park. Restoration has expanded to other streams managed by the U.S. Forest Service, Bureau of Land Management, and the U.S. Fish and Wildlife Service. Recovery has been so successful that catch and release angling is now allowed in 15 lakes and streams. All reestablished populations are self-sustaining and do not require further stocking. Two additional populations are targeted for the headwaters of the South Platte River and the Arkansas River. Delisting of the greenback cutthroat trout will occur when these populations become self-sustaining.

Apache trout, Gila trout, and Rio Grande cutthroat trout are three species of salmonids native to the southwestern United States. Because of habitat degradation and again competition from non-native species, all three are listed as either threatened or endangered. To restore these fish to their native rivers, the Service has taken an ecosystem approach to identify target streams for restoration, remove the non-native species, and replace them with fry and fingerlings produced at National Fish Hatcheries. Restoration of these trout is occurring on numerous tracts of public and Tribal lands in the southwest.

Federally-listed endangered, threatened and candidate fish species are being handled at 30 National Fish Hatcheries, two Fish Technology Centers, and two Fishery Resource Offices. Nine hatcheries currently propagating or maintaining listed fishes are devoted entirely to those purposes.

Twenty-eight listed fish species are currently being propagated or held at Service facilities. Eleven species recognized as candidates species or proposed as threatened or endangered are also being held at Service facilities. The Service holds these 39 species to ensure the survival of members of imperiled populations, to produce seed stock to replenish declining natural populations, or to conduct research and development activities.

### COASTAL ECOSYSTEM PROGRAM

The Coastal Ecosystems Program is helping to conserve endangered and threatened species and reducing the need to add more species to the list by using an ecosystem approach to conserve habitats. The foundation of this program is the integration of Service authorities and capabilities in priority coastal ecosystems and the building of broad partnerships to conserve and recover the habitats for fish, wildlife and plants. Our focus on coastal ecosystems is important because nearly 50 percent of all U.S. endangered and threatened species, including 75 percent of the federally listed birds and mammals occur in or are dependent upon coastal ecosystems.

### PRIVATE LANDS PROGRAM

The Service's Private Lands Program also contributes to the conservation of listed species. The Service has facilitated perpetual dedication of over 350 parcels of Farmers Home Administration (FmHA) inventory lands exceeding 100,000 acres for permanent conservation purposes. These properties, initially acquired by FmHA as collateral on defaulted real estate loans, are transferred in fee title to the Service and other Federal agencies and to State agencies for conservation purposes. Many of these properties have been retained in public ownership solely because of their habitat value to endangered, threatened, or candidate species.

In addition, the Service also assists FmHA establish perpetual conservation easements on inventory property as it is sold to private individuals. These easements are managed by the Service in the National Wildlife Refuge System, or are assigned to state fish and wildlife agencies to manage. Whereas the 1990 Farm Bill requires

that easements to protect and restore wetlands be established prior to the sale of inventory property, FmHA also has establishes easements on habitats for listed or

proposed endangered or threatened species.

Some of our most prominent listed species, such as the bald eagle, timber wolf, and whooping crane have benefitted directly from FmHA transfers and conservation easements, as have other important but more obscure species such as the Ozark bigeared bat, the Santa Cruz long-toed salamander, and the American burying beetle. In addition, whenever possible, we target our efforts and design projects to benefit candidate species to reduce the future need for listing. The success of these programs on public lands and elsewhere is part of the reason we have been able to propose the reclassification of the bald eagle from endangered to threatened status in much of the conterminous United States.

Another aspect of the Trust Species Habitats initiative, known as Partners for Wildlife, entails working with private landowners and other non-Federal partners to restore wildlife habitats on private lands and on public lands such as State and County parks and wildlife management areas. While the emphasis of this program is on private lands, projects as diverse as riparian restoration along streams containing listed and proposed fishes, gravel bar construction for piping plover nesting, and installation of metal gates at cave entrances to protect bats have been implemented under this program to benefit declining species on public lands.

### CONCLUSION

On June 15, before this same Subcommittee, Secretary Babbitt noted that he operated on three principles—1) use comprehensive, unimpeachable science, 2) get involved early, and 3) maintain an ecosystem focus. He also noted the critical importance to all of these of maintaining strong partnerships. I believe you have heard in our testimony and will hear from others today that these are principles shared throughout this Administration.

The issues and species that I have discussed today are not the sole responsibility of the Service. All Federal agencies must act as a team if we are to conserve the Nation's remaining biodiversity. The conservation of biodiversity ultimately depends on the stewardship of all species under the leadership of the States and the Federal Government in partnership with private landowners. Such partnerships are essential in balancing the needs of wildlife and plant conservation with natural resource development. This alliance, if properly developed could minimize the need to list species under the ESA, since the threats to their continued existence will have been avoided at the earliest possible stage.

Thank you for your time and consideration. If there are any questions, I will be happy to address them.

STATEMENT OF NANCY FOSTER, DEPUTY ASSISTANT ADMINISTRATOR FOR FISHERIES, NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Mr. Chairman and Members of the Subcommittee: I am Dr. Nancy Foster, Deputy Assistant Administrator for Fisheries of the National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration, U.S. Department of Commerce. I appreciate this opportunity to discuss the success NMFS has had in cooperating with other Federal agencies to carry out programs to conserve and restore threatened and endangered species. Under the Endangered Species Act (ESA), NMFS is responsible for the listing, protection, and recovery of threatened and endangered marine, estuarine, and anadromous species.

NMFS believes the ESA is extremely important and necessary for the protection and conservation of species and populations that are endangered or threatened with extinction, and for the conservation of the ecosystem on which these species depend. am aware that the ESA has its critics. Under the leadership of this Administration, we are dramatically changing how we implement the ESA so it is more responsive to the concerns of the public while still providing the measures needed to protect

listed species.

Cooperation with the U.S. Fish and Wildlife Service

As one of the two Federal agencies with primary responsibility for listed species, I am pleased to report that NMFS and the U.S. Fish and Wildlife Service (FWS) are working closely to ensure that our ESA policies, guidelines and programs are consistent. This is essential for the public and for the Federal agencies that must consult with us and that also have a duty to conserve listed species.

As NMFS becomes more involved in the development and approval of habitat conservation plans, the joint "no surprises" or "a deal is a deal" policy announced August 11, 1994, by the Department of Commerce and the Department of the Interior will become more important. This policy will provide greater certainty for states, local governments, and private industry that need to address long-term planning and, at the same time, provide the flexibility needed to meet the needs of listed species. This is a good example of how we are working with other Federal agencies to make the ESA work more effectively.

Cooperation Among Federal Agencies

While NMFS and the FWS share responsibility for identifying and listing threatened and endangered species, the crafters of the ESA were wise to involve the entire Federal Government in the conservation and recovery of these species. NMFS has encouraged and has sought to improve cooperation and coordination among the Federal agencies that share the major ESA responsibilities.

Last June, the Administration announced proposals to improve implementation of the ESA. A key element of that initiative was the formation of a Federal Interagency ESA Working Group. The purpose of the Working Group is to identify, develop and implement reforms that streamline and improve the performance of the ESA. The White House requested Federal agencies on the Working Group to identify both problems and potential solutions related to administration of the ESA.

The Memorandum of Understanding (MOU) announced yesterday was signed by seven major Federal agencies, and involves 18 of their component agencies. This MOU on implementation of the ESA was the first result of this Working Group and must have set a record for the level of interagency cooperation. The MOU recognizes that in addition to the section 7 consultation responsibilities under the ESA which all Federal agencies share, there is also a responsibility under section 7(a)(1) for these agencies to use their authorities to further the purposes of the ESA by carrying out programs for the conservation of threatened and endangered species. The MOU stipulates that the Federal agencies will work together to protect particular geographic areas. Regional teams will choose those areas, identify the threats to species and ecosystems in those areas, and find ways that Federal agencies can work with others to alleviate threats to species and ecosystems.

NMFS, as a cooperator in the MOU, will work to achieve the purposes and common goals of the agreement by:

1. Using our authorities to further the purposes of the ESA by carrying out programs for the conservation of Federally listed species including implementing appropriate recovery actions that are identified in recovery plans;

2. Identifying opportunities to conserve Federally listed species and the ecosystems on which those species depend within existing programs or authori-

3. Determining whether NMFS' planning processes effectively help conserve threatened and endangered species and the ecosystem on which those species

depend: and

4. Using existing programs, or establishing a program if one does not currently exist, to evaluate, recognize, and reward the performance of line officers who are responsible for implementing programs to conserve or recover listed species or the ecosystem on which they depend.

In a related MOU signed in January of this year, we have agreed to work together to use our combined authorities to help prevent the listing of species that have been identified as "candidate" species. These are species that are bending toward being listed as threatened or endangered under the ESA. Under the MOU, the Federal agencies will work together and participate in the conservation of selected plant and animal species and their habitat to reduce, mitigate, and possibly eliminate the need for this listing.

Another example of Federal cooperation involves Pacific salmon. Habitat loss and modification have contributed significantly to the decline of Pacific salmon. Federal lands have been heavily managed for timber, range, minerals and other commodities. The health of Federal forest lands is vital to maintaining and restoring aquatic resources, including Pacific salmon. For areas outside of the President's Forest Plan, the U.S. Forest Service (USFS) and Bureau of Land Management (BLM) have proposed both an interim and long-term strategy to begin the restoration of aquatic habitat and riparian areas on Federal land. The interim strategy is PACFISH which was released for comment in March 1994; the long-term strategy will be proposed in geographically specific Environmental Impact Statements—one for eastern Washington and Oregon, and one for Idaho and Montana in about 18 months to 2 years.

In part, PACFISH will amend USFS and BLM land use plans on all Federal lands in Oregon, Washington, Idaho and northern California, outside of the President's Forest Plan area. This includes Land Use Plans for 15 national forests in four For-

est Service Regions in four states and seven BLM districts in four states.

Under section 7 of the ESA, NMFS, BLM, and the USFS have been consulting on the interim PACFISH proposal. Through this consultation PACFISH has been strengthened to provide better protection for Snake River salmon. We are pleased with the high level of cooperation.

Another example of cooperation is the Bay/Delta Ecosystem Partnership in California which is an agreement among four Federal agencies, including NMFS, and the State of California, on a process designed to provide more reliable water supplies for California, to protect wildlife in the Bay/Delta ecosystem, and avoid the listing of more endangered species. NMFS fully supports this agreement which was so ably negotiated by all the Federal partners. Now that the framework has been finalized, the state and the Federal agencies will focus on the technical and procedural aspects of improving coordination of water operation to meet endangered species needs and developing long-term solutions to Bay/Delta issues. I might add that this entire process began about 1 year ago when four regional offices of these Federal agencies decided they wanted to prove to critics that Federal agencies could cooperate and signed an agreement to coordinate all Federal actions that affect the Bay/Delta.

### Conclusion

With the Federal agencies working together and involving local, state, and tribal governments in our actions, we can more efficiently and effectively protect the species as the ESA requires.

Thank you, Mr. Chairman. I would be happy to answer any questions that you or other members of the Subcommittee may have.

### STATEMENT OF Mr. PETER WALSH, ASSISTANT UNDER SECRETARY OF DEFENSE FOR ENVIRONMENTAL QUALITY

I would like to thank Chairman Graham and the members of this Subcommittee for inviting me to testify today on behalf of the Department of Defense. My name is Peter Walsh and I am the new Assistant Deputy Under Secretary of Defense for Environmental Quality. I oversee the conservation, pollution prevention, and compliance sections within the Environmental Security Office.

Department of Defense lands are home to many important species and habitats. More than 300 listed and candidate threatened and endangered species are found on our 25 million acres of land. DoD takes pride in its stewardship responsibility and has had policies in place to protect natural and cultural resources for many years. This early commitment has evolved into well-defined, formalized, and integrated conservation policies.

Our military lands and water hold a storehouse of rare biological resources—desert tortoise, bald eagle, manatees, least tern, greenback cutthroat trout, desert bighorn sheep, western snowy plover, smooth coneflower, red-cockaded woodpecker, Florida scrub jay, loggerhead sea turtle—just to name a few. Consultations under

the National Environmental Policy Act and section 7 of the Endangered Species Act have been carried out for over 20 years, ensuring that military activities don't adversely affect threatened and endangered species who call our lands home. Using the 1960 Sikes Act, DoD installations develop plans to conserve and enhance fish and wildlife populations in cooperation with the Department of the Interior and state fish and wildlife agencies. We intensively use our lands for military training while still protecting the biological resources found on them.

Building on this conservation legacy, our current efforts focus on completing inventories on all our lands, discovering hidden and sometimes rare species that live there. For example, at the Presidio in San Francisco, we found the only known example of Raven's manzanita, a coastal shrub. At Camp Pendleton in California, we have the largest known breeding populations of least Bell's vireo, an endangered songbird. Once we have established what resources exist, and the conditions of these resources, we set priorities and management goals for each base. We accomplish this through our Integrated Natural Resources Management Plans. These plans are comprehensive blueprints for managing species and their habitats on a base so that lands will be preserved for generations to come. Always being updated, these plans reflect the dynamic nature of natural systems. These management plans then become part of the base comprehensive plan, used for the long-term operations of a base. DoD understands that well-managed lands can support military training as well as a diversity of species.

In just the past year, DoD's participation in interagency working groups and cooperative agreements has skyrocketed. Under the guidance of our Deputy Under Secretary of Defense for Environmental Security, Ms. Sherri Goodman, protection of natural and cultural resources has become a high priority on all our military installations. DoD has been active on various interagency groups, including White Houseled efforts focusing on Ecosystem Management, Biodiversity, and the Endangered Species Act. On Earth Day 1994, we announced a collaborative effort with the Department of the Interior to enhance ecosystem management in the Mojave Desert. In collaboration with The Nature Conservancy and the Keystone Center, we have initiated a dialogue to provide recommendations for biodiversity management on our lands. In support of the North American Waterfowl Management Plan, DoD is identifying ways to expand cooperative efforts with the U.S. Fish and Wildlife Service to promote waterfowl habitat enhancements on even more military installations.

The Department of Defense would not have the option of being a major player in these partnerships and interagency working groups without having years of responsible natural resource planning on our installations behind us. Knowing the challenges that exist when an agency must manage lands for several, sometimes conflicting purposes has enabled DoD to participate with land management agencies on an equal footing. It is the work of our natural resources managers at our installations which forms the strong foundation for this increased conservation role.

In these times of shrinking budgets, Federal agencies—no matter what their mission—must work together to share resources and information, and implement management plans. No one agency can unilaterally solve today's environmental problems nor adequately protect species—it is a cooperative effort. I am extremely pleased to be sitting here today with the directors and assistant administrators from the various Federal agencies who share the Department of Defense's interest in protecting endangered and threatened species.

The military testing and training mission is compatible with the goals of environmental agencies. All it takes is careful planning. The fact that threatened and endangered species have continued to thrive on our military installations is proof of this. Protection of threatened and endangered species has not hurt our military readiness, and in some cases, has even enhanced it. By managing DoD's 25 million acres in an environmentally responsible manner, making sure our activities do not harm threatened or endangered species, our military readiness has improved. In the real world, soldiers operate in regions where they must learn to avoid certain areas and objects while still carrying out their military mission. By mirroring this real life example on a military installation that contains endangered species, soldiers learn to concentrate their activities away from sensitive species and their habitats. Species are protected and military training is refined.

I would like to share with the subcommittee today some of our numerous success stories in endangered species management. Eglin Air Force Base in northern Florida is home to the fourth largest population of endangered Red-cockaded woodpeckers in the country. The Air Force natural resources personnel have carried out both short-term, species-specific projects, and long-term ecosystem-based actions that enhance the woodpecker's habitat. These actions included prescribed fires to control invading hardwoods and promote the regeneration of longleaf pines, and constructing artificial cavities. Efforts to date have stabilized a declining population of woodpeckers and the population is starting to show signs of an increase.

Another example is the Marine Corps Base at Camp Pendleton located in southern California in one of the most developed areas of the state. As of 1985, due to habitat loss throughout its range, the least Bell's vireo was down to less than 200 pairs nationally. But thanks to a cooperative effort between the U.S. Fish and Wildlife Service and Camp Pendleton, an installation that contains 5,000 acres of riparian woodlands, populations of the vireo have increased from 90 nesting pairs to about 210 nesting pairs over a 6-year period. Camp Pendleton now supports 40 percent of this bird's breeding population nationwide. Although Camp Pendleton is one of the Marine Corps' most heavily used aviation facilities, careful planning and enhancement activities have substantially increased the number of nesting pairs and helped bring the species back from the brink of extinction.

With only 14 known populations of Tennessee Yellow Eyed-Grass, the discovery in 1991 of two populations at Fort McClellan, Alabama was a welcomed surprise to the U.S. Fish and Wildlife Service. It was even more important because these were the only known populations of these endangered plants that entirely occur on Federal lands. Coordination between the natural resources personnel at Fort McClellan and the Fish and Wildlife Service has led to the development of a management plan that will protect the Tennessee Yellow Eyed-Grass in the years to come. Other agencies are starting to realize what a great storehouse DoD lands are

for biological resources.

Another good example of the shared benefits accrued from protecting endangered species and improving the military mission involves the West Indian manatee, found from Florida up through Georgia. These gentle creatures spend a lot of their time idling in the warm waters which can cause unfortunate run-ins between them and motorized boats. After one such incident involving a tugboat at Naval Submarine Base Kings Bay, Georgia, DoD personnel from Kings Bay coordinated with the Fish and Wildlife Service and manatee researchers to devise a protection plan. One of the recommendations was to develop a protective device to fit around the tug thrusters to protect manatees from injury or death. The Naval Submarine Base worked with a tug manufacturer to develop a design that would protect the manatee while still providing the same operability. Tests proved that the tug guards not only protected the manatees from strikes, but they also enhanced the tug's efficiency and overall performance. Due to the initial success, Kings Bay placed guards on its remaining three tug boats and on 24 other small crafts. This example highlights how the protection of a species can lead to other, unexpected benefits.

Our success stories are not only on American soil. In Panama, DoD is working with The Nature Conservancy to conduct a rapid ecological assessment of all the species found on DoD lands within the Panama Canal Zone. This is a vital ecoregion that contains some of the highest biodiversity of any lands currently managed by the DoD, and some of the highest diversity anywhere on the globe. DoD will continue to work closely with Panama as the Panama Canal Zone is returned to full Panamanian sovereignty at the turn of the century. Although DoD will turn over all its land holdings in Panama, we hope to assist the country in continuing to protect the rich diversity of species that live in this region. DoD is proving on a daily basis that the military mission and protecting and enhancing endangered species populations are not incompatible goals for military installations.

There are many other examples of military installations in all branches of the Services that have discovered populations of endangered or threatened plants and animals and are coordinating with Fish and Wildlife Service or the National Marine Fisheries Service on developing management plans to ensure protection and enhancement of the species. One of our hopes in participating in the Interagency

Working Group is to share these success stories, to hear what other agencies are doing, and to learn from each other.

In closing, DoD has found the Endangered Species Act to be an important tool for managing our 25 million acres. When proposed military actions could have a negative effect on a threatened or endangered species, the action is halted, moved elsewhere, or modified to comply with the law. The Endangered Species Act forces us to look at all the consequences of our activities and to choose alternatives that avoid impacts on endangered species. It strives to enhance populations, always with the overriding goal of bringing a species off the endangered species list. We will continue to work with Fish and Wildlife Service and the National Marine Fisheries Service to improve its effectiveness.

I would be happy to answer any questions from the Committee.

STATEMENT OF DAVID G. UNGER, ASSOCIATE CHIEF, FOREST SERVICE, DEPARTMENT OF AGRICULTURE

Mr. Chairman and members of the subcommittee: thank you for the opportunity to discuss activities of the Forest Service in the conservation of endangered species on National Forest System lands.

### Program Responsibilities

The Forest Service has multiple-use management responsibilities on 191-million acres of forests, rangelands and grasslands in the National Forest System. Our challenge for the Forest Service is to manage with an ecosystem perspective for all uses while ensuring protection of the resource base, including threatened and endangered species (T&E Species). As we have seen in the Pacific Northwest with the spotted owl and salmon issues, this is no easy task. We are committed to continually improving our management, with a strong scientific foundation, to insure long-term sustainability of the resources under our care.

About one-third of all species currently listed under the Endangered Species Act are known to occur on the National Forests and Grasslands. As other lands and habitats come under increasing human pressure, public lands are becoming increas-

ingly important places for rare species and species at risk.

The Forest Service has been successful in protecting and improving habitat conditions for many T&E species throughout the United States and instrumental in focusing attention on international conservation efforts. With help from the Forest Service, the bald eagle, peregrine falcon, grizzly bear, eastern timber wolf, blackfooted ferret, Puerto Rican parrot, and greenback cutthroat trout have been brought back from the brink of extinction. Several of these species have been or are under consideration for being reclassified from Endangered to Threatened status.

Let me elaborate on one of these efforts. The grizzly bear, nearly extinct in the contiguous 48 states, has been the object of conservation measures for some time. An interagency Grizzly Bear Committee, which has always included the Forest Service, was established in 1983. Through successful implementation of recovery guidelines, specifically those intended to reduce human-caused mortality and to enlarge secure habitats, grizzly bear populations are stable or increasing in the North Continental Divide Ecosystem and the Yellowstone Ecosystem. Delisting of the species for these two areas is now under active consideration. Recovery work continues in four areas.

in lour areas.

We have provided a more detailed statement on grizzly bear and other species in a supplemental statement to this testimony. It is important to point out that this success story, like most of the others, required coordinated efforts with our partners and cooperators.

The Endangered Species Act of 1973 (ESA) serves as an important tool for furthering the conservation of species and the ecosystems in which they exist. This Act has a crucial purpose to preserve species by conserving habitat and associated biological resources. Implementation of the Act is a key component of our ecosystem management efforts. Through recovery efforts for T&E species, we have adopted new management practices that improve the health of entire ecosystems. We now know that T&E species serve as excellent biological indicators of ecosystem health.

But we must also be patient. Implementation of ecosystem management, which is essential to restore degraded habitats necessary for the recovery of endangered species, will not immediately affect the rate of species listings under ESA. Nevertheless, we are confident that healthy forests and grasslands will result in a significant decline in the rate of species listings over time.

We recognize that recovery of T&E species is not a quick or simple process, nor is it inexpensive. In 1993, the Forest Service spent \$39 million on measures to protect 253 listed species. Of this amount, \$8.3 million went to Forest Service research supporting studies on 69 listed species. The majority of all T&E Species expenditures were spent on the following 12 species: bald eagle, northern spotted owl, red-cockaded woodpecker, four Snake River salmon stocks, grizzly bear, gray wolf, peregrine falcon, Mexican spotted owl and marbled murrelet.

### Role of Forest Service Research in the T&E Program

Research plays a critical and supportive role in the Forest Service's efforts in management and recovery of T&E species on our lands. Species are lost when we lack the basic understanding of what an organism requires for its existence or when we are unable to predict how a particular ecosystem will respond to a perturbation or change. The role of research is to acquire both the knowledge of the habitat needs of T&E species and the ability to predict how T&E species will respond to habitat manipulation. Forest Service research has been instrumental in the successful recovery efforts involving the grizzly bear and red-cockaded woodpecker and in helping in the ongoing planned recovery for many other species.

### Sensitive Species Program

Early on, we embraced the notion that the best way to conserve T&E species is by implementing a proactive strategy that, through protection and habitat conservation, can prevent the need for listing. Waiting for a species to be listed before initiating conservation measures is simply waiting too long. In 1980, to formalize this approach, the Forest Service created a sensitive species program. Under the program, we identify species of concern and implement habitat conservation strategies before their survival is clearly at risk. So far, we have designated about 2,300 species of plants and animals as sensitive. Many of these species are associated together in rare or unique communities. Our conservation strategies emphasize ecosystem restoration and multi-species approaches.

In the past year, we have worked with other Federal agencies and our non-federal partners to further this listing-prevention strategy. An agreement was signed in January with four Federal agencies, including the two ESA regulatory agencies. It provides the framework for preventing the need to list additional species under the Act through the development of conservation assessments, strategies and agreements. Other Federal and State agencies are considering joining this effort.

In the first year under the agreement the Forest Service has focused on projects that have a high probability of successful completion; i.e., single species approaches which have limited or localized habitats. Long-range efforts will include multi-species and community approaches that make the most sense ecologically. Thirty to 35 projects are projected for completion in 1994 and cover many taxonomic groups and geographic areas. Examples range from the talus snail conservation agreement in Southern Arizona and bull trout conservation strategies in the Intermountain West, to small forest carnivore conservation assessments throughout North America.

### Future Direction

As evidenced by the number of agencies represented here today, conservation of T&E species depends on the activities of many organizations. Because species and their habitat requirements rarely conform to lines on maps, the efforts of Federal agencies must be highly coordinated if we are to effectively and efficiently address this issue.

Recent experience shows we can operate in a new, more productive way. We are now implementing larger scale planning efforts as a result of threatened, endangered and sensitive species issues. The President's Plan for the Pacific Northwest, which was focused on the range of the Northern spotted owl, is one example. The PACFISH strategy for management guidelines to protect salmon habitat is another.

We also need to find ways to deal with the complexities of coordination between the provisions of ESA and other laws which govern our work, such as the National Environmental Policy Act and the National Forest Management Act which have posed challenges in the past. The most obvious difficulty arises from the dissimilar time frames we face when amending forest plans, completing section 7 consultations and addressing NEPA requirements. We must find a way to restore stability to our resource programs and reduce the cost of doing business while meeting the purposes of ESA.

There are very productive steps underway that can help in this regard. The Forest Service is an active member of the recently established Federal Interagency ESA Working Group. The purpose of the group is to identify, develop and implement reforms that streamline and improve implementation and administration of the ESA. One of the first products of this group is a Memorandum of Understanding (MOU) establishing the general framework for inter-agency cooperation and participation. Yesterday, we proudly became one of 14 agencies to sign this document. The MOU contains procedures designed to expedite completion of recovery plans, streamline consultation processes, and focus agencies resources on conservation of species and ecosystems. More importantly, it provides a vehicle for avoiding the pitfalls of agency functionalism and geographic boundaries that have frustrated past efforts to fully realize the goals of the ESA.

### Summary

The Forest Service has 20 years of experience in administering the provisions of the ESA on National Forests and Grasslands. The complexity of the issues addressed by ESA are well known but we must not let the challenges we face in conserving T&E Species overshadow our accomplishments under the Act.

We will continue to work with our partners in the conservation of species, habitats, and ecosystems for the recovery of threatened and endangered species. We continue to learn better ways of meeting the intent of the Act itself. Through successful implementation of ecosystem management, we hope to prevent further listing of additional species and improve the status of many species that are already listed. The Endangered Species Act is a necessary and important tool in our continuing efforts to manage our National Forests and Grasslands.

This concludes my prepared remarks. I will be pleased to answer your questions.

The following list represents some of the successful recovery efforts for T&E species made by the Forest Service in concert with partners and cooperators:

Greenback cutthroat trout (Colorado) This species was listed as endangered in 1967. As part of a conservation strategy, the Fish and Wildlife Service, National Park Service, Forest Service and the Colorado Department of Wildlife have restored the species to more than 40 lakes and streams in and around Rocky Mountain National Park and other areas in Colorado. The greenback cutthroat trout was reclassified as threatened in 1978, and if conservation efforts continue at the current rate it could be delisted by the year 2000.

Oregon silverspot butterfly (Oregon) When this species was listed in 1980 it was found in only one location, the Siuslaw National Forest. In 1983, the Forest Service began a habitat restoration program to re-establish grassland communities this species depends upon. Today there are three secure populations of the silverspot on the Siuslaw National Forest. This species is no longer on brink of extinction and the grassland community it depends upon is again represented on the forest.

Grizzly bear (Western United States) An Interagency Grizzly Bear Committee (to which the Forest Service has belonged since its inception) began work in 1983 on the recovery of the threatened grizzly bear. Populations are stable to increasing in the North Continental Divide Ecosystem (northwestern Montana) and increasing in the Yellowstone Ecosystem. The increase in the Yellowstone Ecosystem has been through successful implementation of the grizzly bear guidelines, specifically those designed to decrease human caused mortality and an increase in secure habitats for bear use. Interagency Conservation strategy plans are being drafted for the management of the grizzly in these two ecosystems once they are delisted. Recovery work

continues in the other four grizzly bear recovery areas (North Cascades of Washington, Selkirks of Idaho and Washington, Cabinet-Yaak of Montana and Idaho, and the Bitterroot Ecosystem in Idaho and Montana).

Plant species delistings (western United States) Several plant species occurring on NFS lands have recently been removed from the Federal T&E list. These include Rydberg milk-vetch in Utah (1989), McKittrick pennyroyal in New Mexico and Texas (1993), and tumamoc globeberry in Arizona (1993). These delistings resulted from increased inventories by the Forest Service and others, which discovered previously unknown populations. These increased Forest Service survey efforts are a result of implementation of inventory efforts as a key element of conservation strategies for these species.

Puerto Rican parrot (Puerto Rico) In September, 1989, Hurricane Hugo wiped out nearly half of the estimated wild Puerto Rican parrots. Joint Fish and Wildlife Service, Puerto Rico Department of Natural Resources and Forest Service research and management efforts have successfully restored the population to near pre-Hugo levels. This has been an tremendous example of a successful interagency and research and management partnership in T&E Species recovery.

Red-cockaded woodpecker (Southeastern United States) This woodpecker was listed as endangered in 1980. In 1986, 69 percent of the populations on National Forest System lands were declining and at extreme risk of extirpation. Since 1990, the Forest Service has implemented an aggressive habitat restoration program which includes growing-season burning in longleaf pine ecosystems. Artificial cavities and population augmentation have also been part of the conservation strategy. Today we have turned the corner on recovery for this species with fewer populations showing evidence of population decline. A long-term strategy for conservation of this species on National Forest System lands will be issued this year.

STATEMENT OF DANIEL P. BEARD, COMMISSIONER OF RECLAMATION, DEPARTMENT OF THE INTERIOR

### INTRODUCTION

Mr. Chairman, my name is Daniel P. Beard, and I am the Commissioner of Reclamation for the Department of the Interior. I appreciate the opportunity to appear before this Subcommittee to discuss the efforts of the Bureau of Reclamation to coordinate its regulatory and management activities with other Federal agencies in order to protect and manage river basins for the continued survival of endangered species, the restoration of their habitat, the promotion of agricultural enterprises, and for urban and industrial needs.

We are currently coordinating our actions with several Federal agencies in many locations throughout the West, and we believe that this coordination has enhanced our recovery efforts for threatened and endangered fish species. I would like to focus my testimony today on coordination efforts in three distinct geographic areas: the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay/Delta) in California, the Columbia/Snake River Basin in the Pacific Northwest, and the Upper Colorado River Basin. I would like to turn first to interagency coordination in the Bay/Delta.

### FEDERAL AGENCY INVOLVEMENT IN THE BAY/DELTA

The stakes are high in the Bay/Delta. It is the single most important element in California's water system. The Bay/Delta plays a key role in sustaining both human economies and a natural ecosystem. It supplies over 40 percent of California's drinking water. It represents the largest wetland habitat on the West Coast. It provides irrigation water for over 200 crops, including 45 percent of the nation's fruits and vegetables. It supports over 120 species of fish, including large commercial and recreational fisheries. The two largest water projects in the State, the State Water Project and the Central Valley Project operated by the Bureau of Reclamation, move water from northern California to central and southern California via the Delta. Both projects' pumping plants are located in the southern portion of the Delta.

For years, California water interests have sparred over the Bay/Delta. Private and public water users have sought both increased diversions from the Delta and greater certainty in the amount allowed to be diverted each year. Recreation and environmental groups have sought greater protection for the Bay/Delta ecosystem, including water quality standards adequate to protect the fish and other aquatic species. These water quality standards would be designed to protect the estuarine habitat and other designated fish and wildlife uses in the Delta from excessive salinity intrusion from the Bay and, therefore, would require increases in Sacramento and San Joaquin River flows through the Delta and corresponding reductions in Delta exports. Consequently, Delta diverters have a major stake in these standards.

Four Federal agencies have significant responsibilities within the Delta under various statutes. They are: the Environmental Protection Agency (EPA), the National Marine Fisheries Service in the Department of Commerce, the Fish and Wildlife Service and the Bureau of Reclamation in the Department of the Interior. The potential for conflict in carrying out the daily activities of the agencies is significant. To minimize the duplication and improve the efficiency of the effort, as well as to minimize the potential economic impacts which could result from disjointed administration of responsibilities, in September of 1993 these agencies entered into an "Agreement for Coordination on California Bay/Delta Issues." The Federal Ecosystem Directorate, also known as "ClubFed," formed by this Agreement consists of regional executive-level representatives from each of the four signatory agencies. The Agreement, among other things, reaffirms the Federal commitment to a comprehensive ecosystem-based approach to the Bay/Delta estuary, and to coordinated efforts on the implementation of the Endangered Species Act (ESA), the Clean Water Act (CWA), and the Central Valley Project Improvement Act (CVPIA). While meeting conservation objectives, we are on the verge of demonstrating that Federal agencies can work together to administer several major conservation statutes simultaneously, thereby minimizing disruption to lifestyles and economic activity.

### Goals of Federal Coordination

The goals of this coordinated effort are to:

- Recognize the potential for integrated relationships in a natural ecosystem where four agencies with varied missions and often conflicting direction have responsibilities regarding the waters and biota of the Bay/Delta. Therefore, we seek to administer our responsibilities under the CWA, the ESA, and the CVPIA in a manner that ensures consistent and complementary, not conflicting, actions. We also seek to coordinate our actions with those of our counterpart State agencies.
- Recognize the key role the Bay/Delta plays in California's water supply system. Consequently, we seek to implement the CWA, the ESA, and the CVPIA in a manner that minimizes the water supply reductions and spreads the burden of any reductions equitably, to the extent such considerations are allowed in those laws. We have focused on finding flexible alternatives that provide needed environmental protection and result in the minimum impacts on water users.

The Fish and Wildlife Service and EPA have agreed, in separate settlements to lawsuits, or as part of the Agreement for Coordination on California Bay/Delta Issues, to take final action by December 15 of this year on the following proposals: Bay/Delta water quality standards (EPA); designation of critical habitat for the Delta smelt (FWS); and whether or not to list the Sacramento splittail as a threatened species under the ESA (FWS).

Recognizing that Federal cooperation was not the final answer, the four agencies have involved our counterpart State agencies in this effort. We have jointly executed a framework agreement with the State of California regarding State and Federal coordination and cooperation in three areas: formulation of water quality standards for the Bay/Delta; coordination of Federal and State water project operations to meet water quality standards and Federal and State ESA requirements; and development of a long-term comprehensive management strategy to address the multiple environmental, economic, and water supply interests in the Bay/Delta ecosystem. It is a significant step forward in our search for long-term solutions in the Bay/Delta.

Neither the Federal nor the State government acting alone can accomplish these vital tasks. Thus, over the course of a year, our coordination effort has expanded from a Federal effort focused on a limited number of Federal actions to a much larger effort that includes more players, specifically our counterpart State agencies, and is addressing longer-term issues. We are also engaging non-governmental organizations. In carrying out this important cooperation and coordination, we intend to comply with all applicable laws, including the Federal Advisory Committee Act.

The cooperation throughout this process by the Federal and State agencies involved will provide the basis for relationships directed at long-term solutions to critical resource management problems. We don't underestimate the challenge before us, but the economy and environment of California, which are inextricably linked

in the Bay/Delta, demand our best efforts.

### COLUMBIA/SNAKE RIVER BASIN

The National Marine Fisheries Service (NMFS) listed the Snake River sockeye salmon as endangered and Snake River fall and summer/spring chinook as threatened in December 1991 and May 1992, respectively. NMFS recently reclassified both the Snake River fall and spring/summer chinook as endangered. A Recovery Team established by NMFS issued its final recommendations for a recovery plan in May 1994. The final recovery plan being developed by NMFS is expected to be issued in 1995.

Of early importance in addressing salmon conservation was obtaining a temporary change in the nature of use of storage water under Idaho water law. In March 1992, the Idaho Legislature passed legislation which initially enabled Reclamation to cooperate more effectively with Idaho water users to secure additional water for salm-

on migration flow augmentation.

Reclamation also leads or participates in the implementation of several other conservation activities, such as: screening of water diversions, water conservation demonstration projects, model watershed programs, improved water efficiency and water marketing programs, water availability studies, investigation of additional storage possibilities, establishment of land management practices to improve riparian and instream habitat to aid salmon and steelhead, and water quality studies.

Reclamation has been, and continues to be, a party to a number of conferences and consultation activities in response to the ESA listing of the Snake River salmon runs and other species within the Columbia River Basin. Prominent among these activities are the joint consultations between Reclamation, the Corps of Engineers, and Bonneville Power Administration concerning the effects of Federal Columbia River Power System Operations on the listed salmon runs.

### Current Activities to Protect Endangered Species

I would now like to focus on cooperative efforts underway to avoid jeopardy to salmon in the Pacific Northwest.

- The Bureau of Reclamation signed a Memorandum of Agreement with NMFS and the Fish and Wildlife Service (FWS) for joint consultations when more than one ESA listing is involved with an action. For example, in the Snake River Basin there are three species listed as endangered: salmon whose protection and recovery are administered by NMFS; and eagles and snails whose protection and recovery are administered by FWS. The joint consultation shortens the time, avoids conflict among terms prescribed in Biological Opinions, and allows close coordination of actions within an ecosystem.
- In a cooperative effort with the States in the region and the 14 Indian Tribes of the Northwest, the Bureau of Reclamation, Bonneville Power Administration, and the Corps of Engineers have established a procedure to share draft Biological Opinions under the ESA before they are finalized. The States and the Tribes are also provided the opportunity to participate in the development of the hydro-agencies' Biological Analysis of the Columbia River Power System Operations. Additionally, the States and Tribes have the opportunity to review and comment on draft Biological Opinions.
- During the operating season for the Columbia River Power System, there
  are weekly meetings of all the Federal agencies, States, Tribes, and other inter-

ested organizations to discuss target flows and the operation of the water system under the Biological Opinion of the ESA for the salmon in the Snake and Columbia Rivers. The group is called the In-Season Management Group and is sponsored and coordinated by the Northwest Power Planning Council. Its purpose is to monitor flows, determine the movement of fish, consider forecasts for future streamflows, get the latest input from fishery managers before making operations decisions, and discuss strategies for meeting flow and operation targets.

• There are several other meetings taking place regularly to help Federal agencies keep their activities coordinated in the Pacific Northwest. Regional agency heads for the Bureau of Reclamation, Bonneville Power Administration, and the Corps of Engineers meet bimonthly to coordinate all activities within the Basin. The Forest Management Group has been expanded to include representatives from each of these agencies to coordinate further work on salmon issues.

### UPPER COLORADO RIVER BASIN

Four fish species that inhabit the Colorado River have been federally listed as endangered: the Colorado squawfish, the bonytail chub, the humpback chub, and the razorback sucker. Critical habitat has also been designated for these fish. While each of these species was once abundant in the Colorado River Basin, populations have been declining. They are threatened with extinction due to degradation of their natural habitat, which resulted in large part from the construction and operation of water development projects.

Through the consultation process required by the Endangered Species Act, the Fish and Wildlife Service has determined that several Reclamation projects are jeopardizing the continued existence of endangered fish. Recovery of these species will require resolution of a broad set of issues, with potentially competing solutions. Complicating factors include: the migratory nature of the fish; the relationship between State water rights systems and Federal responsibilities; and the need for suf-

ficient habitat, including water of sufficient quality and quantity.

The need to protect endangered fish species threatened to embroil all interested parties in a confrontation between resource protection and resource development. Recognizing that such a confrontation was unlikely to result in progress toward recovery of listed species, and could lend a measure of uncertainty to future water development, the parties endeavored to accommodate their competing demands through discussion and negotiation.

To provide a coordinated solution to protection of the four endangered species in this ecosystem. Reclamation, the Fish and Wildlife Service, water users, the environmental community, Western Area Power Administration, and the States of Colorado, Wyoming, and Utah have established the Upper Colorado River Recovery Implementation Program. This program serves as the reasonable and prudent alternative under the ESA, and thereby allows continued operation of Reclamation projects and development of new water supplies to occur simultaneously with recovery of the fish. The program has been in place since 1988, and is proceeding successfully. All meetings are open to the public, thereby allowing all interested parties to participate.

Recovery program efforts are designed to restore, enhance, and protect habitat required for the recovery of endangered species in the areas which will have the highest probability for success. The program participants implement habitat improvements and conduct studies, population surveys, and other activities to aid in the protection and recovery of endangered species. These actions attempt to mitigate the cumulative impacts of development throughout the Upper Colorado Basin.

### ESTABLISHMENT OF A FEDERAL INTERAGENCY ESA WORKING GROUP

Last June, the Administration unveiled a set of proposals to improve the implementation of the Endangered Species Act during its testimony before the Senate Committee on Environment and Public Works. A key element of that initiative was formation of a Federal Interagency ESA Working Group. The purpose of the Working Group is to identify, develop, and implement reforms that streamline and improve the performance of the ESA. Federal agencies serving on the Working Group are identifying both problems and potential solutions related to the administration of the ESA. Our efforts to date have resulted in the development of a Memorandum of Understanding (MOU) in which other agencies and ourselves have agreed to establish a general framework for cooperation and participation in the exercise of our responsibilities under the ESA.

Reclamation, as a cooperator in the MOU, seeks to improve our ESA implementa-

tion responsibilities by agreeing to:

1. Use our authorities to further the purpose of the ESA by carrying out programs for the conservation of federally listed species, including implementing appropriate recovery actions that are identified in recovery plans;

2. Identify opportunities to conserve federally listed species and the ecosystems

upon which those species depend within our existing programs or authorities;

3. Determine whether our respective planning processes effectively help conserve threatened and endangered species and the ecosystems upon which those species depend:

4. Use our existing programs, or establish a program if one does not currently exist, to evaluate, recognize, and reward the performance of line officers who are responsible for implementing our programs to conserve or recover listed species or

the ecosystems upon which they depend.

We have also agreed to further the ESA goal of species and ecosystem protection by establishing geographically-based teams to identify and address critical threats to species and ecosystems. In a closely-related but separate MOU, we have agreed to work with the other cooperators using our combined authorities to seek out conservation opportunities to help avoid the need for Federal listing of candidate species as threatened and endangered under the ESA.

All this will be accomplished by Reclamation and other cooperators with the appropriate involvement of the public, States, and tribal and local governments. On a national level, the first such public involvement activities are already being

planned for mid-October.

We believe, by working together, we can identify additional opportunities and take actions to help resolve the seemingly intractable issues we face today.

Mr. Chairman, this concludes my prepared statement. I will be happy to respond to any questions Members may have.

### STATEMENT OF DENNIS P. FENN, ACTING ASSOCIATE DIRECTOR, NATURAL RESOURCES, NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR

Mr. Chairman, I appreciate the opportunity to appear before the committee today to testify on the protection of endangered species on lands and waters within the National Park System. The Service is charged by Congress with the protection and management of unique and complex natural systems within the National Park System. This includes maintaining the natural abundance, diversity, and behavior of all plant, fish, and wildlife communities contained within them.

The National Park Service administers 367 parks covering 81 million acres of land in all 49 states from Alaska to Florida, and from the U.S. Virgin Islands to American Samoa. These areas constitute about 4 percent of the total U.S. land surface. The National Park System protects representatives of more than half of North America's plant species and a large proportion of the continent's animal species. We manage these resources to sustain them unimpaired for current and future generations.

In fulfilling this mission, the Service works closely with other agencies charged by law to protect and regulate environmental matters. Significant among those is our sister agency the U.S. Fish & Wildlife Service. We routinely consult and cooperate on all matters which may have an impact on a federally listed threatened or endangered species within the National Parks. The protection of these species is integrated into a broad management effort to protect all of the natural and cultural resources in our care. Key to that effort is a recognition that the natural resources we protect function as part of larger ecosystems.

For many years the National Park Service has given special attention to species in trouble. During the early part of this century, Yellowstone National Park, along with other western parks, built up the depleted populations of animals such as the bison, elk, and pronghorn. Trumpeter swans came back from the edge of extinction with the protection of nesting and wintering birds in the Yellowstone ecosystem. From the 1950's through the 1970's gray wolves were protected at Isle Royal National Park, grizzly bear population numbers have increased in Glacier and Yellowstone, and the Hawaiian geese were protected at several Hawaiian parks.

In 1973, with the passage of the Endangered Species Act, the National Park Service increased its efforts to protect federally listed species in the parks. National Park Service land is habitat for at least 33 federally listed plants and 87 federally listed animals. One hundred sixty-seven parks contain at least 822 populations of these threatened and endangered species. In addition, there are at least 1,324 populations of category 1 and 2 candidate species in 143 parks. The Park Service management policies also extends protection to State-listed species as well.

The Park Service employs a variety of research and resources management measures to monitor, protect, maintain and restore threatened and endangered species in the parks. The piping plover and marine turtle nest screening are successful examples of the management and research efforts of the Park Service towards endangered species recovery.

The Atlantic Coast piping plover population occurs from New Foundland to South Carolina. In 1988, there were 13 pairs of nesting birds on beaches managed by NPS within the boundaries of Cape Cod National Seashore. Management actions, such as increased monitoring, pedestrian and pet restrictions in nesting areas, predator exclosures around nests, and beach closures to off-road vehicles, were implemented. By 1994, the number of nesting pairs of piping plovers in Cape Cod National Seashore had increased to 74. The productivity of the piping plovers also increased significantly from a low in 1986 of 0.3 chicks to 2.0 chicks fledged per nesting pair.

In 1993, Canaveral National Seashore completed the tenth year of its marine turtle nest screening program. Raccoons, the predators of sea turtle nests, were the cause of a 95 percent loss of nests prior to the nest screening program. As a result of increased management efforts, this year there was an 85 percent success rate of nests in Canaveral National Seashore.

## INTERAGENCY COOPERATION

Interagency collaboration is a critical element in endangered species conservation. Last June, the Administration unveiled a set of proposals to improve the implementation of the Endangered Species Act (ESA) during its testimony before the Senate Committee on Environment and Public Works. A key element of that initiative was the formation of a Federal Interagency ESA Working Group. The purpose of the Working Group is to identify, develop, and implement reforms that streamline and improve the performance of the ESA.

At the request of the White House, Federal agencies serving on the Working Group are identifying both problems and potential solution related to the administration of the ESA. Our efforts to date have resulted in the development of a Memorandum of Understanding (MOU) in which several other agencies and ourselves have agreed to establish a general framework for cooperation and participation in the exercise of our responsibilities under the ESA. The Park Service, as a cooperator in the MOU, seeks to improve ESA implementation by working to achieve the purpose and common goals of the agreement. These common goals will be accomplished through our participation in both national and regional interagency recovery teams or working groups. In a closely-related but separate MOU, we have agreed to work with the other cooperators using our combined authorities to proactively seek conservation opportunities to help prevent the need for Federal listing of candidate species as threatened and endangered under the ESA. All this will be accomplished by the Park Service and other cooperators with the appropriate involvement of the public, and State, tribal, and local governments, and by adopting an ecosystem management approach. We believe, by working together, we can identify additional opportunities and implement actions to help resolve the intractable issues we fact today.

#### PUBLIC/PRIVATE COLLABORATION

The National Park Service played a key role in the development of the North American Native Plant Conservation Initiative, a forward-looking strategy to identify management actions for conserving plants thus recovering the listed species and avoiding the need to list the candidates under the Endangered Species Act. This newly established public/private collaboration will develop a national strategy for plant conservation which will address regional conservation priorities for native flora. A Memorandum of Understanding was signed by the National Park Service along with 6 other Federal agencies on May 25, 1994 in ceremonies at the U.S. Botanic Garden. Several non-governmental organizations, such as the Center for Plant Conservation, the Garden Clubs of America, and The Nature Conservancy, have joined the initiative to work on plant conservation actions, public outreach and education, research, and information needs. This initiative will emphasize a multi-species, multi-agency, ecosystem approach to plant conservation and, in doing so, will serve the agencies as a more efficient and effective methodology for plant conservation.

Mr. Chairman, I would now like to discuss three areas where the Park Service is already working closely with its sister agencies to protect and restore threatened or endangered species in large ecosystems. These areas are the Greater Yellowstone Ecosystem, the Pacific Northwest, and the Everglades.

## WOLF REINTRODUCTION IN THE GREATER YELLOWSTONE ECOSYSTEM

The Park Service along with U.S. Fish and Wildlife Service and U.S. Forest Service, is playing a major role in the recovery of the gray wolf through its reintroduction to Yellowstone National Park. The Final Environmental Impact Statement was completed earlier this year; the Record of Decision was signed in June; and the first group of wolves will be reintroduced to Yellowstone this fall and winter. Wolves were once an integral part of the Yellowstone ecosystem; their reintroduction will help to restore the natural operation and balance of the Greater Yellowstone Ecosystem. It is fitting that Yellowstone, the world's first national park, should play such an important role in the recovery of the gray wolf.

#### PACIFIC NORTHWEST FOREST PLAN

Another example of both interagency cooperation and ecosystem management is the President's Forest Plan in the northwest. This plan provides conservation measures for the northern spotted owl and the marbled murrelet, both federally listed species. The Park Service, with 8 other Federal agencies, is an active participant in the implementation of the Forest Plan with a full time staffer in the Regional Ecosystem Office in Portland, and representation on the Regional Interagency Executive Committee and the Research and Monitoring Committee. There is unprecedented cooperation among agencies in implementing this ecosystem-driven management plan.

## EVERGLADES ECOSYSTEM RESTORATION

The presence of threatened or endangered species requiring the added protection of the Endangered Species Act, is often indicative of dysfunction within a natural ecosystem. Nowhere is this more clearly the case than in South Florida. The National Park Service administers four units of the National Park System in South Florida, Everglades National Park, Big Cypress National Preserve, Biscayne National Park, and Dry Tortugas National Park. They are nested within an interrelated ecosystem that stretches from the headwaters of the Kissimmee River near Orlando, to the tip of the Florida Keys at the Dry Tortugas. Everglades National Park and the Everglades ecosystem have long been recognized as one of the most severely threatened in the National Park System.

There are 56 federally listed threatened or endangered species and 29 candidate species within the entire South Florida Ecosystem. Everglades National Park alone contains 14. The large number and wide distribution of these listed and candidate

species is one of the clearest indications that the problems in South Florida and the Everglades are both serious and systemic.

Massive drainage and development of wetlands, systematic alteration of water flows for flood protection and water supply, nutrient rich runoff from developed agricultural lands and urban waste water effluent, massive encroachment on remaining wetlands by invasive exotic plants like Melaleuca and Brazilian Pepper, toxic levels of mercury in the food chain, massive algae blooms and wholesale collapse of plant and marine communities in Florida Bay, are only the highlights of the threats to the natural resources we are charged to protect within the South Florida Ecosystem.

In recent years, a variety of significant restoration activities have been undertaken at all levels of government in an attempt to halt deterioration and begin the process of both Park and Ecosystem recovery. One such project was set in motion by the passage of the Everglades Expansion Act of 1989. In it, Congress authorized the addition of 107,000 acres to the park in northeast Shark River Slough. It further authorized and directed the Army Corps of Engineers to modify the canal, levee, and pump structures in that area and restore more natural water deliveries to the park. We are working very closely with the Corps and the local project sponsor, the South Florida Water Management District, to develop a structural design and operational criteria which will effectively accomplish this general restoration goal.

Throughout the design and environmental assessment process, the Service and the Corps consulted with the U.S. Fish & Wildlife Service on any potential impacts to endangered species. Through this consultation, we learned that an area of current critical habitat for the Snail Kite was considered as adversely impacted by these proposed hydrological restoration options. This area had not historically been critical habitat for the Kite. However, previous alterations to the water management system had impounded and raised water levels thus improving Kite habitat at the same time these alterations were degrading marsh wetlands within other parts of the water conservation areas and equally important, within the East Everglades addition to Everglades National Park.

To address this impact we have funded, with the U.S. Fish & Wildlife Service, a comprehensive research project to determine whether the Snail Kite is mobile enough in its behavior to respond favorably to further alteration of part of its habitat back to more natural conditions. Fortunately, data from the study being conducted indicate that the Kite readily relocates to, and successfully nests and breeds in, areas where water conditions are favorable. These favorable conditions include the areas we are proposing to restore to historic conditions.

During our consultation and discussion of this situation with the Corps and the U.S. Fish & Wildlife Service, a much broader issue concerning the management and protection of endangered species on public lands became apparent. When land management agencies such as ours undertake projects aimed at restoration of natural ecological systems there will certainly be disruptions to the physical environment and often to biological communities as historic natural conditions are restored. This is further complicated when a system is in a relatively advanced state of deterioration as evidenced by the level of disturbance and the presence of a large number of threatened or endangered species. Optimal conditions for recovery of a single species may conflict with requirements of another individual species. All the current evidence indicates that restoration of ecosystem functions provides for the maximum benefit of all species in the context of a stable and sustainable environment.

In December of 1992, field managers of the U.S. Fish & Wildlife Service and the National Park Service recognized these issues and unanimously proposed undertaking a comprehensive multi-species recovery planning effort for federally listed threatened and endangered species in South Florida. In September 1993, the Federal Task Force on South Florida Ecosystem Restoration, chaired by the Assistant Secretary of the Interior for Fish, Wildlife & Parks, endorsed this concept and made it one of its initial priorities for a coordinated ecosystem management effort. The National Park Service strongly supports this approach to recovery planning and stands ready to support U.S. Fish & Wildlife efforts to pursue such initiatives, particularly in South Florida.

This concludes my statement, Mr. Chairman. I would be pleased to answer any questions that you or other members of the Subcommittee may have.

STATEMENT OF DR. JOHN H. ZIRSCHKY, ACTING ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

Mr. Chairman and members of the subcommittee: I am Dr. John Zirschky, Principal Deputy and currently Acting Assistant Secretary of the Army for Civil Works. Thank you for the opportunity to describe the activities of the Army Corps of Engineers to conserve endangered species on public lands.

After summarizing Army's responsibilities related to the Endangered Species Act and public lands, I will review some past and current issues related to agency compliance with the Endangered Species Act, especially those involving extensive coordination between Federal agencies. I will then provide additional detail on our efforts with regard to section 7(a)(1), which directs all Federal agencies to carry out programs, within their authorities, for the conservation of endangered and threatened species. The third point I will address is coordination of endangered species issues with non-Federal entities.

#### ARMY'S RESPONSIBILITIES

Project Development and Stewardship of Project Resources

The Army civil works project-related activities of planning, construction, operations and maintenance are carried out through the Corps of Engineers to implement the Secretary's authorities for navigation, flood damage reduction, and related purposes. The Corps has planned, developed and currently maintains approximately 12,000 miles of inland and intracoastal waterways; has constructed approximately 8,500 miles of flood control levees and 383 reservoirs; and constructed and currently operates 75 hydropower facilities.

In all, we have stewardship responsibility for nearly 12 million acres of upland,

wetlands and open water.

It is in four functional areas related to Corps missions that we have the greatest opportunity to protect and enhance endangered species and their habitat. These areas are project planning, resource management at existing projects, dredging of Federally-maintained waterways under the National Dredging Program, and the operation of multipurpose flood control/hydropower projects on our Nation's rivers. In these functional areas, determinations are made whether consultation under the Endangered Species Act is required, and other steps required by the Act, such as resolving jeopardy issues, are taken. It is also here that opportunities to conserve endangered species are identified and carried out.

In addition to these four functional areas, the Corps carries out a regulatory program that includes the authority of the Secretary to regulate dredging, structures, and other types of work in navigable waters of the United States; the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act; and the transport of dredged material for the purpose of ocean disposal under Section 103 of the Marine Protection, Research, and Sanctuaries Act. Endangered Species Act compliance is required before issuance of any permit under our regulatory program. It should be noted that most of the permit applications processed by the Corps are for actions on private, rather than public. lands.

Federal Interagency Coordination and Specific Issues

The Corps has been actively involved on the Federal Interagency Endangered Species Act Working Group, which held its first meeting on June 29, 1994. This group is co-chaired by deputy assistant secretaries from the Department of the Interior (DOI) and the Department of Commerce. The purposes of the working group are to review current implementation of the Act and to develop administrative or regulatory initiatives to improve implementation of current law. Subgroups have been established to address 1) Federal agency implementation of section 7(a)(1) of the Act, 2) Federal agency participation on endangered species recovery teams and in

recovery plans, and 3) improvement of processes under section 7. The Corps representative chairs the section 7 processes subgroup and participates on the remaining two.

I would now like to highlight four Corps activities, in four different regions of the country, that have significant endangered species issues warranting discussion in terms of Endangered Species Act coordination between Federal agencies. In each case, the activity or project is complex and the endangered species of concern have high visibility on both a regional and a national level.

## Pacific Northwest Hydropower-Salmon

The first case involves endangered salmon of the Pacific Northwest, namely the sockeye, the spring/summer chinook, and the fall chinook, that are under the jurisdiction of the National Marine Fisheries Service (NMFS). It should be noted that in this area we are also dealing with several other endangered or threatened species, including eagles, falcons, sturgeons, and snails, which are under the jurisdiction of the Fish and Wildlife Service (FWS).

The Columbia River salmon runs, which were comprised of 10 to 16 million salmon in the mid-1800's, have declined to less than three million salmon. The runs are predominantly hatchery-produced fish. Runs of wild-produced salmon, including the listed species, continue to decline. Many human activities, including hatchery operations, hydropower operations, harvest of fish, and habitat alteration, impact salmon and other fishery resources of the Columbia River Basin. Also involved is a complex institutional framework involving a multitude of Federal, State, and Tribal entities with jurisdiction over the resource, as well as non-government entities, with substantial interests in the issue.

Scientific information and data describing the extremely complex life cycle and life requirements of the salmon as the basis for management decisions needs improvement. Young salmon hatch and rear in fresh water, migrate to the ocean as juveniles, spend two to 5 years in the ocean, and then return as adults to spawn in their natal freshwater stream. Hence, their habitat is diverse and geographically widespread, and many differing interests throughout the region, including commercial fishermen, irrigators, shippers, recreationalists, Indian tribes and power producers, are affected by what happens to that habitat. Each of these diverse interests is anxious to find a solution that minimizes adverse impact on their interests. In this regard, Army feels that some of the attention focused on the Corps during resolution of this endangered species issue is partly the result of misunderstandings by interested parties as to Federal agency roles and authorities in implementing the Act.

Nevertheless, Army clearly recognizes the impact of its hydroelectric power development on the salmon and the difficulty of simultaneously addressing the many proposed solutions and their effects. Within its authorities, Army is doing its part in a comprehensive, regionally endorsed strategy for salmon recovery. At this point in time, we look to Commerce to develop a recovery plan.

#### Southeast Coast Navigation—Sea Turtles and Right Whales

The second Corps activity I wish to highlight is maintenance of the Federal coastal navigation system along the southeast coast of the U.S. A 1990 study by the National Academy of Sciences, entitled "Decline of the Sea Turtles, Causes and Prevention," estimated that hopper dredges were killing 50 to 500 loggerhead sea turtles and 5 to 50 Kemp's ridley sea turtles annually. Followup monitoring of channel maintenance activities at the Brunswick and Savannah, Georgia, ship channels from March through July 1991 documented the mortality of 38 sea turtles.

Following receipt of a regional biological opinion under the Endangered Species Act, the Corps South Atlantic Division issued policy guidance restricting hopper dredging in Southeast navigation channels to the period of December through March. An intensive research effort was also initiated to develop new technologies to protect sea turtles and to determine the seasonal distribution of sea turtles. Over the past 3 years, in cooperation with the NMFS, restricted dredging demonstrated that a total of 20 million cubic yards of material were dredged from the nine harbor projects with the taking of eight loggerhead and one Kemp's ridley. This is substantially less than the number allowed by the incidental take provision in the biological

opinion. Through our research effort, we have developed a hopperdredge draghead designed to deflect sea turtles. While not affecting dredging production rates, this deflecting draghead was 95 percent effective in deflecting artificial sea turtles during developmental testing. With NMFS support, the new draghead is being tested this month at the Canaveral, Florida ship channel, which historically has a year-round abundance of sea turtles.

The Corps sea turtle research effort is producing biological information in addition to the dredging effects results. Each turtle collected during the monitoring effort was measured, aged and tagged. Future recapture of these turtles will yield new information on sea turtle growth rates, behavior and distribution.

Another endangered species, the right whale, was found to be at potential risk during the December through March dredging window established for sea turtle protection. The offshore areas of northern Florida and southern Georgia are the only known right whale calving grounds in the North Atlantic Ocean. To protect the whales, the Corps has been conducting observation flights over these waters and when right whales are sighted, dredge operators, enroute to an ocean disposal site, are instructed to reduce speed. Not a single right whale has been imperiled in over a thousand round trips to the disposal site. The overflight operation is being expanded with the participation of NMFS, Coast Guard and Navy. This interagency effort, dubbed the "Right Whale Early Warning System," will be part of the recovery effort for the whale under the Endangered Species Act.

Mississippi and Missouri Rivers and Tributaries—Shore Birds and Sturgeon

Two shore birds given protection by the Endangered Species Act, the least tern and the piping plover, nest on bare sandbars and islands below Corps constructed and operated reservoirs in the Missouri River. In 1986, the year after these species were added to the endangered and threatened species list, the Corps began operating the Missouri River Mainstem Reservoir system to prevent flooding of nests.

Formal consultation under section 7 of the Act was initiated with FWS in 1987 and concluded in 1990 with the issuance of a jeopardy biological opinion. The FWS determined that jeopardy could be avoided through habitat creation, censusing and surveying nesting areas, public information and education, and scheduling reservoir water releases to avoid impacting the birds and their nests. The Corps has implemented these alternatives, and the effectiveness of these measures can be seen in the use of the Corps-created nesting habitat. In 1993, the only least tern nesting below Gavins Point Dam was on 18 Corps-made islands (125 total acres). This represented an estimated 27 percent of the total adult least tern nesting population on the entire Missouri River system. Success has not been easy. While meeting the primary purposes of flood control and navigation, we have struggled to meet the bird productivity goals, (i.e., number of young fledged per nesting pair of adults) set forth in the FWS biological opinion. Our efforts have been made more difficult with several years of drought followed by a year of flood. As a result, we have failed to meet bird productivity goals. Another factor affecting nesting of both terns and plovers is natural predation. Mink and raccoon destroyed all eggs and chicks on several of the islands in 1993. However, monitoring of breeding pairs showed that the birds averaged over two clutches of eggs that season, and on one island of less than a quarter-acre in size, 102 pairs of terns nested and 50 chicks were fledged.

The pallid sturgeon, present in the Missouri and Mississippi Rivers, was listed as an endangered species in 1990. The Corps is currently involved in formal section 7 consultation regarding the effects of Corps operation of the Federal navigation/flood control projects on this species. With the recently issued draft biological opinion, the Corps was faced with a project operation dilemma. The scheduling of operations to meet the critical needs of the sturgeon should also meet the needs of the plover but appears to differ significantly from meeting the needs of the tern, which needs earlier in the year. An ecosystem approach is being applied to better understand and resolve this issue.

## Gulf Intracoastal Waterway—Whooping Crane

A 30-mile portion of the Gulf Intracoastal Waterway in Texas, including a 13.25-mile reach within the Arkansas National Wildlife Refuge, crosses designated critical

habitat of the endangered whooping crane. Critical habitat is being lost at a rate of about two acres per year due to erosion caused by wave action and currents in the waterway. The FWS draft biological opinion states that vessel movement is the principal cause of whooping crane habitat loss in this area, and although vessel operations are under Coast Guard jurisdiction, FWS has looked to the Corps to resolve the problem. In the short-term, the Corps Galveston District participated in a volunteer-supported project to fill and place bags of dry concrete mix at critical areas along the shore. Also, about 9,300 feet of articulated concrete mat bank protection was constructed along one critically eroding area in 1992 and 1993. These two efforts successfully accomplished their purposes. The Galveston District is working with the Corps Waterways Experiment Station to develop bank protection projects utilizing material routinely dredged from the waterway. In addition to continuing the placement of concrete mat protection, ongoing feasibility studies are examining the creation and restoration of approximately 1,600 acres of marsh for crane habitat, as part of the navigation project's Dredged Material Management Plan.

#### REGULATORY PROGRAM

Each permit application submitted under the Corps regulatory program, including those for actions by another Federal, State or local agency, is reviewed for compliance with applicable environmental laws and regulations. Federal agencies who apply for permits are responsible for ensuring that their activity is in compliance with the Endangered Species Act. For applications submitted by State or local agencies and the private sector, the Corps determines if the proposed activity may affect a listed endangered species, and, if so, section 7 consultation with NMFS or FWS is initiated.

## Section 7(a)(1) Compliance

Endangered species management on Corps property is conducted in accordance with the objectives of individual recovery plans and is guided by a sound ecosystem management approach. With the increasing attention being given to sustainability and biological diversity, endangered species are benefitting from the management actions that the Corps is taking at project sites. For example, in our environmental stewardship activities, we are developing broad management goals and performance measures which give high priority to endangered species.

Additionally, in April of this year, I requested the Corps to establish an Environmental Policy Task Force to carefully reevaluate all of the agency's environmental policies and suggest ways of improving performance, including any related to Endangered Species Act compliance. Preliminary findings identified several improvements for Corps endangered species activities, including 1) renewed and active coordination with FWS and NMFS, with an increased focus on emphasizing the value of ecosystem-based evaluations, 2) active participation in the development and implementation of recovery plans, and 3) promotion of ecosystem conservation and management to aid in avoiding the need to list species as threatened or endangered.

The fact that we are taking a hard look at our performance related to endangered species protection does not mean that we have been without successes. The recovery of the bald eagle has been the focus of considerable effort at Corps projects nation-wide. One of these activities, highlighted in a 1992 issue of National Geographic Magazine, involved the removal of fertile eagle eggs from nests in central Florida, transport by air to an Oklahoma laboratory for hatching, and transferral of the chicks to hacking towers at sites in Mississippi and Alabama. In all, over 100 bald eagles were released into the wild from towers at Corps projects. Success of this bald eagle hacking program was possible only because of extensive coordination with and cooperation of the FWS, state resource agencies, conservation groups, universities and others.

In another example, the Corps has been instrumental in the recovery of Everglades snail kites in the Loxahatchee National Wildlife Refuge in southeastern Florida. The kite feeds almost exclusively on snails. At the request of the refuge manager, the Corps floods the marshes of the refuge throughout the year, which has led to an increase in the snail population and, in 1992, the first successful nesting of kites in that refuge in 20 years.

#### Coordination with Non-Federal Entities

Coordination of Corps activities with State resource agencies, as well as other pertinent non-Federal entities, is routinely accomplished through the National Environmental Policy Act (NEPA) process, whereby scoping meetings are held with other interests to identify potential issues, including endangered species. The Corps actively exchanges information and consults with State agencies, Indian tribes, universities and conservation groups regarding endangered species issues. Many Corps efforts, including the bald eagle program and whooping crane habitat protection, would not have been possible without the extensive non-Federal cooperation that exists.

The Endangered Species Act directs Federal agencies to implement the section 7 consultation process when their actions may affect endangered and threatened species and/or their critical habitat. Therefore, historically, only Federal agencies formally consult with the FWS or the NMFS. Currently, there are non-Federal agencies and groups that are demanding that they be involved in the same consultation process as is used by Federal agencies. The basis for their demand is that the results of the Federal agency consultations have direct impact upon their interests.

#### CONCLUSION

Given the complexities of the Endangered Species Act and the various public and private interests that become involved in implementing the Act, issues related to endangered species on public lands will continue to challenge the technical expertise of Federal agencies, and we will continue to devote significant resources to these issues. The Corps, in cooperation with others, has been making diligent efforts to expand our knowledge of endangered species and management of ecosystems to further the continued existence of these species. Many unique and complex projects, utilizing state-of-the-art equipment and techniques, have been employed by the Corps to better understand, protect and restore endangered species and the communities and ecosystems to which they belong. Focused dialogue by all parties and Federal agency consensus building must continue so that we can become more confident that our limited fiscal and personnel resources are directed for the greatest public good.

Mr. Chairman, that concludes my statement. I would be happy to answer any questions.

# STATEMENT OF DENISE MERIDITH, PEPUTY DIRECTOR, BUREAU OF LAND MANAGEMENT, DEPARTMENT OF THE INTERIOR

I appreciate the opportunity to appear here today to discuss the programs of the Bureau of Land Management (BLM) for endangered species conservation on public lands.

Last June, during its testimony before the Senate Committee on Environment and Public Works, the Administration unveiled a set of proposals to improve the implementation of the Endangered Species Act (ESA). A Federal Interagency ESA Working Group was established to identify, develop, and implement reforms that streamline and improve the performance of the ESA. As requested by the White House, Federal agencies serving on the Working Group are identifying both problems and potential solutions related to the administration of the ESA. Our efforts to date have resulted in the development of a Memorandum of Understanding (MOU) in which we and other agencies have agreed to establish a general framework for cooperation and participation in the exercise of our responsibilities under the ESA.

The BLM, a cooperator in the MOU, as part of its responsibility in implementation of the ESA, is working to achieve the purpose and common goals of the agreement by:

1. Using its authorities to further the purpose of the ESA by carrying out programs for the conservation of federally listed species, including the implementation of appropriate recovery actions that are identified in recovery plans;

2. Identifying opportunities to conserve federally listed species and the ecosystems upon which those species depend within its existing programs or authorities:

3. Determining whether our planning processes effectively help conserve threatened and endangered species and the ecosystems upon which those spe-

cies depend; and,

4. Using existing programs, or establishing a program if one does not exist, to evaluate, recognize, and reward the performance of line officers who are responsible for implementing programs to conserve or recover listed species or the ecosystems upon which they depend.

We have also agreed to further the ESA goal of species and ecosystem protection by establishing a geographically-based team to find and address critical threats to species and ecosystems. The BLM and the other cooperators will also involve the public, States, tribes, and local governments in these projects. On a national level, the first such public involvement activities are already being planned for mid-October

We believe, by working together, we can identify additional opportunities and implement actions to help resolve the many serious issues we face today.

The BLM manages over 270 million acres of public lands, primarily in the 13 Western States. This is approximately one-eighth of the total land in the United States (U.S.).

In managing the public lands, we refer to several categories of animal and plant species collectively as "special status species." These include species which are under review by the U.S. Fish and Wildlife Service (FWS) for listing as threatened or endangered ("candidate species") pursuant to the ESA, species officially proposed by the FWS for listing, and species already listed as threatened or endangered. We also designate as "BLM sensitive" species which are State-listed or of special concern in a State.

Public lands managed by the BLM provide habitat for more than 1,100 animal and plant species which are listed as threatened or endangered under the ESA or are candidates for such listing. This is approximately 30 percent of all such species in the U.S. There are approximately 215 species (125 animal and 90 plant) on BLM lands which are either listed or proposed to be listed. Sixty percent of all species of listed plants in the Western U.S. occur on BLM lands. One hundred and fifty ani-

mal and 730 plant species on BLM lands are candidates for listing.

The BLM manages a variety of vital aquatic habitats throughout the Western U.S., including 155,000 miles of fishable streams, more than 4 million acres of lakes and reservoirs, and numerous isolated springs. Among the bountiful resources on the public lands are approximately 45 species of fish listed as threatened or endangered and over 75 species considered to be candidate, BLM "sensitive," or State-listed species. Approximately 25 of the 45 threatened and endangered fish species were listed within the past 12 years. This increased number of listed species has resulted in a significant increase in the BLM's associated workload, including consultations required by Section 7 of the ESA, and species restoration planning and implementation.

Because of their generally undeveloped nature, the public lands often provide the last refuge for imperiled species. About one-half of the approximately 200 species that the FWS proposes for listing by 1996 are known or suspected to occur on BLM lands. Clearly, public lands managed by the BLM are important to the recovery of listed species and restoration of candidates so that they can be removed from listing.

Our ability to conserve these species is a direct reflection of the land's ability to provide goods, services, and values to the American public. We cannot meet the long-term social and economic needs of society without first securing the health of the land.

The loss of biological diversity, declines in water quality, the alarming spread of noxious weeds, and diminishing overall land productivity have sent a wake-up call to multiple-use agencies.

One need only look at the declining timber and fisheries industries in the Pacific Northwest to see the linkage between ecosystem health and economic growth. We

can act now. Or, we can act later. The longer we wait—the more costly the solutions—the more severe the social and economic impacts.

Stable fish, plant, and wildlife populations are indicators of healthy ecosystems. As Secretary Babbitt has said, "fish are the most extraordinary, sensitive, environmental indicators that we have."

Many aquatic species are at the lowest levels of the food chain. As such, their health is a direct indicator of water quality. And clean, clear water is essential to local communities with growing economies.

Today, 33 percent of native North American fish species are considered extinct, endangered, threatened, or of special concern. This number has increased 45 percent since 1979.

Freshwater mussels are a telling indicator of water quality. It's a frightening fact that over 70 percent of all North American mussel populations are considered threatened, endangered, or of special concern.

It's easy to ask "why worry about saving some unknown mussel, some obscure fish?" These species are like the warning lights on the dashboard of your car. Driving down the highway, you see one start to flash, but the car's running fine and the engine sounds good. For a few hours, you ignore the light. Later, when the mechanic says you need a new transmission, you start to wonder, "why the heck didn't I check that light?"

As one participant at the President's Forest Conference put it, "all the idiot lights are flashing.!' It's time to check those lights. Disappearing mussels, fish, plants, and songbirds—these are all signals that the land is not healthy.

If we don't take corrective action to fix the causes of species decline then the effects of their decline will reverberate within local communities:

- Drinking water will continue to be contaminated by run-off from abandoned mines:
  - Productive rangelands will continue to be lost to noxious weeds; and,
- Forest health problems will continue to lead to costly wildfires and result ink fewer board feet of timber.

We simply don't have the resources to restore declining fish and wildlife populations on a species-by-species basis. Managing ecological systems in their entirety, rather than focussing on their parts, is the essence of good land stewardship. We are working more closely than ever before with the Fish and Wildlife Service, the Forest Service, the Park Service, other agencies and publics to maintain healthy ecosystems.'

Implementation of strategies such as PACFISH and the President's Forest Plan will enable us to prevent listing dozens of salmon and steelhead populations and many old-growth dependent species.

Our challenge is to strive for sustainability of ecological and economic systems. We think the ecosystem approach to land management can help us to achieve this balance. We will:

- use the best available science to make informed resource management decisions:
- work with the public to develop common goals for

healthy landscapes and sustainable communities;

- respond to new information; and
- adapt to change.

Simply stated, we will apply COMMON sense to COMMON problems for the COMMON good.

We are helping local communities to anticipate and adjust to change through partnerships such as the Trout Creek and Marys River restoration projects in Oregon and Nevada. The efforts of these communities are bringing back imperiled species such as the Lahontan cutthroat trout.

No rhetoric. No lawsuits. No social and economic disruptions. Just citizens working with the government to maintain and restore healthy ecosystems.

Other programs, such as "BRING BACK THE NATIVES" and "FISH AND WILD-LIFE 2000," are joining Federal and State agencies with constituent groups to restore the health of entire watersheds. Healthy watersheds that provide for clean drinking water; greener riparian areas and improved range conditions. Benefits that local communities appreciate and applaud.

Other initiatives, such as Rangeland Reform will give the public:

- an unprecedented degree of involvement in resource planning and decisionmaking;
  - a fair return for their tax dollars; and
- most important, the knowledge that their children will inherit healthy, diverse, and productive rangelands.

Simply stated, lands managed by the BLM provide the last remaining suitable habitat for many imperiled species as well as some of the most productive timber, forage, and mineral lands in the United States. Our efforts to conserve and restore ecosystem health will enable present and future generations of Americans to enjoy the environmental, economic, and aesthetic benefits that the public lands have to offer.

The BLM is committed to managing the public lands in a manner that fully implements the ESA. It is BLM policy to treat species proposed for Federal listing as though they are listed, with respect to Section 7 of the Act (interagency consultation). In addition, to aid in avoiding the need to list species, our policy calls for treating candidate species in the same manner as we treat listed threatened or endangered species.

The BLM has nearly completed a comprehensive strategic planning effort for fish, wildlife, and rare plants. Under the direction of the BLM's national-level Fish and Wildlife 2000 Strategic Plan, we have completed a number of more specific component strategic plans. Some of these national plans are specific to rare species such as the Desert tortoise, Desert bighorn sheep, "special status" fish, and rare plants and natural plant communities which may be found only in a few specific areas. For example, the Desert Tortoise Habitat' Management Plan is a nationwide plan, including management actions, designed to ensure that a viable Desert tortoise population will be maintained within its natural range on public lands in California, Arizona, Nevada, and Utah.

Other plans, tiered to the Fish and Wildlife 2000 Strategic Plan, address the habitat needs of species groups such as big game, upland game, waterfowl, non-game migratory birds, raptors, anadromous fish, and resident fish. We identified rare and declining species that fall within each of these component plans and are giving them special treatment. Our local-level land use plans also give listed and proposed threatened and endangered species, candidate species, and State-listed species special emphasis. All of these plans address the local habitat and ecosystem needs of these species.

Taken together, these national and local plans provide a solid foundation for conserving threatened and endangered species and the ecosystems upon which they depend. They identify the most important areas of concern, establish goals and objectives, and set priorities for management of such species. Rare and declining species receive special emphasis and priority consideration. The plans emphasize improvement in the ecological condition of aquatic ecosystems and plant communities, especially the rare riparian and wetland types. The plans are also the basis for coordinated and cooperative efforts with other agencies and organizations.

A large number of specific conservation actions have been completed and many others are currently underway. I will give you specific examples later in my statement. Continued implementation of these strategic plans will remove threats to and enhance ecosystems for threatened and endangered species, protect unique plant communities, and increase biodiversity.

The BLM is also working to improve its threatened and endangered species management with an active education program being conducted in our National Training Center in Phoenix, Arizona. Courses are provided regularly for technical staff and managers in biodiversity conservation, endangered species regulations, inventory and monitoring methods for rare plants, and other topics.

The BLM activities relating to endangered species can be grouped into four categories: recovery, prevention, section 7 consultations, and habitat acquisition.

#### RECOVERY

Recovery activities are designed to benefit listed species and lead to conditions where those species will no longer need the protection of Federal listing. The BLM actively participates in the preparation of Recovery Plans for many species and has personnel working with the FWS on many species recovery teams. The BLM has specialists with recovery or species-related expertise that the FWS needs to prepare these plans.

I will mention a few recent examples of the BLM's species recovery work.

- The Lake Havasu, Arizona, Fisheries Improvement Project is the largest of its kind ever put into action. Although the primary emphasis is for resident game fish and enhanced sport fishing opportunities, endangered species are an important part of this project, in accordance with both section 7 consultation and recovery provisions. Razorback suckers and Bonytail chubs, both endangered, are being reared in coves of the lake and released when they reach sizes that keep them from falling prey to other species. This project is funded and performed by the BLM and several other agencies and groups under an MOU. We believe the effort will prove to be a critical link in the successful recovery of these species.
- The BLM is actively involved in habitat management for the Southwestern Willow flycatcher, a species proposed for listing as endangered. The BLM, FWS, and Forest Service (FS) offices in Arizona and New Mexico have been working in a concerted effort for riparian improvement to benefit this species. This effort has become more an ecosystem restoration strategy than a single-species venture, and began even before the January 25, 1994, MOU among the agencies. The BLM believes, as do many others, that actions to improve the condition of riparian areas will be a great force in preventing the need to list many other riparian species in the Southwest. We believe, also, that if we take actions soon that lead toward riparian improvement, recovery of the species can begin even before a recovery plan is written.

• The BLM actively participates in several Federal recovery plans and, in some cases, is the manager of the principal habitat involved. Additionally, at our field office level, we are preparing over 300 BLM site-specific management plans which, when completed, should directly improve the potential for recovery of a significant number of listed threatened or endangered fish species.

• In 1991, the BLM and the FS, in cooperation with the National Fish and Wildlife Foundation, began to implement an initiative to restore the health of selected riverine systems and their native aquatic species. The BLM is presently implementing 22 of these "Bring Back the Natives" efforts, in 9 Western States, including projects on Apache Creek in Colorado, Crooked River in Oregon, and Bookcliffs Bitter Creek in Utah. Some projects contribute to the recovery of listed species, while others are intended to help reverse declines of candidate species populations.

• The BLM has played a major role in the recovery of Bald eagles and Peregrine falcons for many years. The BLM annually cooperates with various States and private organizations such as the Peregrine Fund to facilitate recovery of Peregrine falcons throughout the West. The BLM managed lands in Arizona may have potential habitat for new populations of California condors and aplomado falcons.

• The BLM is actively participating in black-footed ferret recovery programs in Wyoming and Montana. Working in cooperation with the FWS and the Montana Department of Fish, Wildlife, and Parks, we will soon be reintroducing bore black-footed ferrets to the wilds. The releases will be made in October of this year at three new sites in south Phillips County, Montana.

• The BLM continues to promote and provide funding for threatened, endangered, and candidate species research activities. Examples include Desert tortoises in Arizona, California, Nevada, and Utah; Mountain quail; California Bighorn sheep; Western Sage grouse; Gunnison Sage grouse; Columbian Sharptailed grouse; Steelhead trout; and several species of Cutthroat trout.

#### PREVENTION

Prevention activities benefit Federal candidate species that could become threatened or endangered. Such activities are designed to cost-effectively conserve species populations or restore them to a level that will not require Federal listing. An MOU signed on January 25, 1994, by Department of the Interior agencies and the FS formalized a cooperative agreement to work in concert to restore ecosystems on which candidate species depend so that they will not need to be designated as threatened or endangered species. The benefits of a proactive approach to conservation of candidate species can be significant and very cost effective.

I will give you a few examples of the BLM's many prevention activities.

The BLM currently has three national strategic plans for managing the aquatic resources located on its lands. In 1991, the BLM published the first such plan, entitled Special Status Fishes Habitat Management. It provides plans for a 10-year program to meet the identified objectives for what we call special status fish. Some of the better known special status species are Lahontan and Bear lake Cutthroat trout, Bull trout, White sturgeon, Paddlefish, and several species each of chub, dace, and pupfish. Implementation of these plans should avoid the need to list approximately 18 candidate species, as well as contribute to recovery of several listed species.

There are three regionally based initiatives in the second national strategy plan, entitled *Anadromous Fish Habitat Management*. The strategy presented in this plan outlines actions needed to halt aquatic habitat degradation currently existing in the

Pacific Northwest and assist in the recovery of depressed salmon stocks.

In March 1993, the BLM and the FS merged efforts to develop a common interim strategy to conserve band restore anadromous salmonid habitat on the public lands. This combined strategy, known as "PACFISH," would conserve and restore Pacific salmon and steelhead habitats and associated watersheds on Federal lands in the West pending development of a longer term strategy. PACFISH stresses the integration of sound scientific and research information with on-the ground management direction. The PACFISH strategy also formed the aquatic and riparian components of the preferred option developed by the multidisciplinary, interagency Forest Conference participants.

Also in 1993, the BLM published its third aquatic resources strategic plan, entitled Resident Fish Habitat Management. This plan outlines a comprehensive blue-print for the maintenance, restoration, and improvement of freshwater fish habitats.

The emphasis of all three strategies is to maintain the health and sustainability of these valuable resources.

Conservation Agreements are formal, written agreements between the FWS and/ or the National Marine Fisheries Service (NMFS) and other Federal agencies, Indian tribes, State or local governments, or private organizations or individuals designed to achieve the conservation or recovery of threatened, endangered, or candidate species through voluntary cooperative efforts. Conservation Agreements are an important way to remove threats to listed species or species that could be proposed for Federal listing as threatened or endangered.

For example, the Bull Trout Conservation Agreement is an agreement designed to reverse the decline of Bull trout populations in Idaho by removing threats to the species and restoring their habitats. Parties to the agreement are the BLM, Regions

1 and 4 of the FS, the FWS, and the State of Idaho.

Eight Conservation Agreements for candidate plant species in Oregon and Idaho have been signed by the BLM and the FWS and are presently being implemented.

The BLM is the lead agency for developing a Conservation Agreement on Federal lands for several species of spring snails in the Great Basin Region. Involved in this project are the BLM, the FWS, the FS, the National Park Service (NPS), the National Biological Survey (NBS), and the Great Basin States.

Another approach the BLM is using to help prevent the need for listing candidate species is the development of site-specific conservation strategies in cooperation with other Federal, State and private interests. In Washington State, for example, the BLM, the Washington Departments of Wildlife and Natural Resources, the FWS, and others developed the Eastern Washington Shrub Steppe Conservation Strategy to remove habitat threats to a host of special status species. Among the listed and

candidate species to be benefited are the Peregrine falcon, Bald eagle, Western Sage grouse. Columbian Sharp-tailed grouse, Pygmy rabbit, and Loggerhead shrike.

Mountain quail, a candidate species, is the subject of a similar conservation strategy. This species has declined significantly in the Intermountain West. A multiagency, multi-organizational group involving Washington, Oregon, Idaho, and Nevada is being formed to develop a strategy to benefit this species. As an initial step, the BLM sponsored an interagency workshop in August 1994 to develop an assessment for this species which may lead to a formal Conservation Agreement.

I am also pleased to mention here that our Great Falls, Montana, Resource Area Office is a member of the managers subcommittee for the recovery of the Grizzly bear in the Northern Continental Divide Ecosystem (NCDE). Grizzly bear popu-

lations in the NCDE have nearly recovered.

The BLM has significantly increased its efforts to inventory candidate and threatened or endangered plants. During FY 1993, over 700,000 acres were inventoried. As a result of these surveys, at least 20 species have been found to be more abundant than previously thought and may not warrant special designations. Such technical information is shared with all concerned agencies. Beginning in 1994, we have coordinated with the new NBS to take advantage, as appropriate, of its biological research expertise to assist us in determining our research needs and applying good science to our resource management activities.'

The BLM initiated a collaborative effort to establish the Federal Native Plant Conservation Committee in May 1994. This group operates under an MOU between the BLM, the NBS, the NPS, the FWS, the FS, the Soil Conservation Service, and the Agricultural Research Service. A principal goal of the Committee is to determine priority conservation needs for native plants and plant communities and coordinate implementation programs. Several conservation organizations have also become Coperators to the Committee, including The Nature Conservancy, Center for Plant Conservation, Garden Club of America, Society for Ecological Restoration, National Association of Conservation Districts, and the Soil and Water Conservation Society.

By working with the ESA and its regulations, the BLM has been able to allow continued environmentally sound development and use of mineral resources on public lands, under multiple-use management principles, while protecting special status species as well as other species found within the same ecosystems. This is accomplished by developing mitigating measures during the planning stages and following through on the environmental requirements for mineral development on these lands.

The BLM presently processes approximately 2,500 applications for permits to drill for oil and gas per year. Each of these applications must adequately address the issue of endangered species protection. Appropriate mitigation measures must be in effect at the time of application or must be developed if additional protection is needed. If acceptable mitigation methods cannot be found, the application is rejected. This same process is also followed in the other parts of the BLM minerals program.

In numerous cases, the BLM procedures, established with the help of mineral leaseholders, have developed appropriate actions for the benefit of listed or proposed species. Examples of such appropriate actions include the use of manmade dens for Kit foxes in California and controlling drilling dates in Montana to benefit the Griz-

zly bears.

Another example of how the BLM endangered species program is working involves a large gravel operation near Las Vegas, Nevada. The site, operating under a BLM community pit designation, was found to include habitat for the threatened Desert tortoise. As a result of the finding, the pit operators were required to surround the site with a tortoise proof fence. They are also paying an additional \$0.25/ ton royalty which is earmarked for use in research and mitigation activities being conducted by Federal and State wildlife agencies.

#### SECTION 7 CONSULTATION

Under Section 7 of the ESA, Federal agencies are required to consult with the FWS or the NMFS to ensure that activities and authorizations do not jeopardize the continued existence of threatened or endangered species or inhibit their recovery.

Consultations with the NMFS or the FWS may be either formal or informal communications. The consultation process is designed to evaluate actions that could either benefit or adversely affect listed species.

The BLM participates in hundreds of formal and informal consultations with both the FWS and the NMFS each year for species listed or proposed for listing. For example, we are presently consulting on salmon, Northern Spotted owls, Marbled murrelets, and numerous other species in the Pacific Northwest, cutthroat trout in the Great Basin, and Colorado River fish species in the Southwest.

#### HABITAT ACQUISITION

Much of the BLM's strategic planning focuses on the value of habitat and its role in the recovery and protection of special status species. Habitat acquisition is another approach the BLM uses to more effectively manage the public lands to protect threatened or endangered species. Acquisition of more than 100,000 acres of habitat, primarily for the benefit of threatened, endangered, and candidate plants was identified in The BLM's Rare Plants and Natural Plant Communities Strategic Plan.

I will cite some examples of our habitat acquisition efforts.

The BLM acquired much of the lands adjacent to the San Pedro River in southern Arizona through a private land exchange. One of the prime features of this tract was the riparian habitat that supported the largest breeding population of Northern gray hawks in the U.S. The Northern gray hawk is a candidate species for Federal listing. Under BLM management, the number of nesting territories has doubled. The need to list this species was reduced due to this acquisition and subsequent BLM management actions.

Through a major land exchange in 1991, and with the assistance and cooperation of numerous public, private, and governmental groups, the BLM acquired 47,000 acres of critically important watershed along the Marys River in Nevada. The 180 miles of streams and related riparian habitat in the Marys River ecosystem are now being actively managed as a comprehensive riparian/aquatic restoration demonstration project designed to restore healthy habitat for threatened Lahontan Cutthroat trout and 11 other special status species, some of them candidate species. Success of the Marys River project will ultimately be measured by whether there is an official delisting of the Lahontan Cutthroat trout. However, it will also be measured by the riparian habitat improvements and how well we provide for long-term sustainable use of the other resources within the same healthy ecosystem.

In the Carrizo Plain Natural Area, California, an ongoing cooperative effort among the BLM, The Nature Conservancy, and the California Department of Fish and Game is protecting thousands of acres of mitigation lands for listed and candidate species such as the San Joaquin kit fox and bluntnosed leopard lizard.

- With assistance from The Nature Conservancy, the BLM acquired 10,000 acres and established a 30,000-acre special management area in western Idaho for Columbian Sharp-tailed grouse.
- The BLM purchased critical habitat for the Desert dace and Lahontan cutthroat trout, in cooperation with The Nature Conservancy as part of the Soldier Meadows Conservation Project in northwest Nevadan

All four of the conservation categories that I have discussed for you today were used in our efforts to protect and conserve the Desert tortoise. The BLM is a major player in-the recovery efforts for the threatened Mojave population of the Desert tortoise. Additionally, the BLM has established goals and objectives and implemented specific management actions that are designed to make listing of the Sonoran Desert tortoise population in Arizona unnecessary.

• In 1988, the BLM developed one of its first strategic plans for the Desert tortoise, focusing on no net loss of habitat, avoidance of negative impacts, compensation for unavoidable impacts, and restoration of degraded habitats. This Rangewide Plan was developed with help from groups outside the BLM and provided goals and objectives for a myriad of BLM protective actions.

Lands in the area with high value for Desert tortoise habitat were identified in BLM land use plans as desirable for acquisition. Thousands of acres of such habitat

have been acquired for inclusion in two important recovery areas in California: the Chuckwalla Bench and the Desert tortoise Natural Area.

Some of the BLM's first large-scale section 7 consultations, regarding grazed lands in threatened Mojave Desert tortoise habitat, were coordinated regionally.

The BLM's Las Vegas District Office developed a Resource Management Plan that included conservation areas and protective prescriptions identified in the draft FWS Recovery Plan.

Close coordination across agency boundaries continues today with the Desert tortoise Management Oversight Group comprised of senior-level managers from the BLM, the FWS, the NBS, and State agencies. Many intensive research efforts have been implemented through cooperators of the Management Oversight Group. Since listing of the Mojave population, this group has been and will continue to be instrumental in working toward recovery of the species.

In conclusion, the BLM has integrated the provisions of the Endangered Species Act into its everyday functions and activities. The related tasks are immense in

scope and number, but vitally necessary.

One challenge now facing us is the marshalling of sufficient resources to be able to implement all needed recovery actions and to manage the public lands in ways that make it unnecessary to list more species. The importance of BLM-administered public lands to these species demands that we meet these challenges, and we will.

This concludes my prepared remarks. I will be happy to respond to questions.

# STATEMENT OF DANA MINERVA, COUNSEL TO THE ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

Mr. Chairman, and members of the Committee, thank you for asking me to be here today.

I am pleased to be here today to discuss the Endangered Species Act (ESA), an environmental law that we in the Environmental Protection Agency (EPA) see as extremely important and valuable to us in furthering our overall environmental objectives. With predictions of 20 percent of animal and plant species becoming extinct within the next 30 years, the maintenance of biodiversity has never been more urgent. Once lost, we will never know what biological treasures or miracle cures these species may have provided.

Resources protected by EPA, such as wetlands, are of critical value to the recovery and survival of many threatened and endangered species. EPA's authorities and responsibilities afford many opportunities to play an active role in species conservation and protection, not only in the water program, but throughout the Agency. In my testimony, I will highlight some examples of how EPA's programs to date have contributed to achieving ESA goals. I will also discuss how our emerging focus on ecosystem management will not only enhance our ability to protect and conserve threatened and endangered species, but will hopefully help to arrest the downward

spiral of species diversity by promoting long-term ecosystem health.

Administrator Browner has made ecosystem protection and biological diversity two of EPA's highest priorities. She recently charged the Agency to adopt a placebased approach to ecosystem protection. As envisioned, this place-based approach seeks to integrate all of our resource programs and authorities with those of other Federal agencies within specific geographic areas and to focus on the key environmental problems unique to those areas. Traditionally, EPA's regulatory authorities and non-regulatory programs have tended to focus on particular sources, pollutants, or water resource uses, rather than on taking an integrated environmental management approach within discrete ecosystems. We now recognize that our efforts to conserve biodiversity require a more strategic and integrated approach than the fragmented approach of the past. As we begin to bring together all of our resource programs and to look at ecosystems as a whole, we can better address the threats to those systems and, consequently, all of the species that depend upon them. We and many of our Federal partners agree that ecosystem management provides a more forward looking, strategic way to protect native plant and animal species before their threatened loss becomes a crisis.

The ESA and the authorities in other environmental protection laws complement one another and form a foundation for EPA action to protect threatened and endangered species and their habitats. While we work to ensure that these laws work in concert to achieve their common goals, we will also identify the threats that are not addressed by our current programs and explore new approaches that allow us to protect species. EPA's Strategy to Protect Endangered Species

EPA has begun an aggressive effort to put into practice our vision for the protection of endangered species. That effort began 9 months ago with a 2-day workshop

attended by the Deputy Administrator and other high ranking EPA staff.

As a result of that workshop, Administrator Browner directed each office within EPA to conduct a thorough review of its endangered species protection activities. She also directed each off ice to develop a strategy to improve how its actions protect endangered species and implement the Endangered Species Act. These strategies are being developed by each program and each region. The strategies are designed to strengthen endangered species conservation in our current programs and within the broader context of EPA's emerging focus on ecosystem protection. Our current plan is to finalize the strategies next year.

The goals of these strategies are to: (1) better meet our obligations to protect and conserve endangered species under the ESA, (2) meet those obligations more efficiently, (3) provide better protection for endangered species, and (4) protect the

ecosystems on which those species depend.

The program strategies will include basic information about those EPA activities that will likely be the subject of section 7 consultation under the ESA. In addition to this basic information, the strategies will go further and map out how EPA will integrate the affirmative protection of endangered species into ecosystem protection, Agency planning, and Agency budgeting. The strategies will help to create consistent application of ESA requirements across programs and throughout the country. In developing these strategies, we will wrestle with many of the challenges that routinely face the Agency. One of these challenges is how to balance our commitment to a strong EPA-State partnership with the strong Federal role that exists under the ESA. For example, under the hazardous waste law, specific facilities receive State permits under the approved State hazardous waste program, and EPA may issue a portion of the permit to include requirements for which the, State is not yet authorized only where a State base permit is in place. EPA's oversight of the State portion is limited to providing comments on the adequacy of the State permits or, in egregious cases, initiating proceedings to withdraw State authorizations. In the water quality standards program under the Clean Water Act, again the States have the primary responsibility for establishing enforceable water quality standards under State law. EPA provides basic scientific research and approves or disapproves the State standards. In the Clean Water Act's permitting programs under Section 404 and 402, either the State or a Federal agency (EPA under section 402 and the Corps of Engineers under section 404) has the responsibility for issuing the required permit. The challenge we face is to comply with the ESA while fulfilling the intent of other environmental laws, and to avoid unproductive Federal second guessing of individual, well considered decisions of the States. We need to foster efficient environmental protection and a good partnership with the States. To do this we. are seeking better ways to integrate endangered species protection into our programs.

We believe that the tools provided in the ESA and other environmental laws allow us the flexibility that we and the Services need to establish an appropriate process for each program, a process that complies with the law and that effectively achieves the intended result of protecting threatened and endangered species. No single, one of our laws is capable of protecting biodiversity. The direction by the Administrator to develop individual program strategies will take advantage of the strengths of each of our environmental laws and foster a comprehensive approach to protecting

species.

Work to develop a comprehensive strategy for the Office of Water is not yet complete. Nonetheless, I would like to share with you a few ideas about where we are and some of the questions we are trying to answer.

Currently, under the Clean Water Act there are a number of actions, essential to our water programs, on which we consult with the Services. For example, we con-

sult under the ESA when we issue permits that allow the discharge of pollutants that may affect endangered or threatened species. In addition, when we provide grants for the construction of particular projects affecting, these species, we consult with the Services. We have, moreover, begun consulting with the Services-informally or formally—when State programs or water quality standards are approved. Thus, when the State section 402 or 404 programs are submitted, or when changes are made that affect species and require our approval, we will consult with the Services to ensure that the approval of those programs does not jeopardize endangered species. This list of &actions on which we consult is not comprehensive, vet it demonstrates the scope of, our existing efforts to ensure, in consultation with the Services, that our actions will be protective of endangered and threatened species. We have additional opportunities to take affirmative actions to protect species, and we are evaluating them for their likely effectiveness. For example, when we focus our efforts on a particular place, like the Great Lakes, how can we build the protection of threatened and endangered species into the protection of the ecosystem? How can we measure our progress in protecting endangered species? Can new information systems help us improve our efficiency at identifying how particular species are likely to be affected by our actions?

In evaluating the answers to these questions and others, I will measure our answers against three principle goals. One is to fulfill our legal obligations; the second is to integrate the protection of endangered species with the protection of the places where those species live; and the third is to use our resources and the resources of the States as efficiently as possible. If we accomplish these goals, I am confident that we will be taking the kind of affirmative, protective actions that Congress envi-

sioned when it enacted endangered species protection.

Interaction of EPA Authorities with the Endangered Species Act

I would like to take this opportunity to highlight a few other programs at EPA and how they interrelate with the ESA.

Many Clean Air Act (CAA) provisions authorize EPA to consider welfare and environmental impacts of air pollution, which include impacts on endangered or threatened species or their habitats. The CAA defines effects on welfare to specifically include, among other things, effects on animals, wildlife, and vegetation. Section 7 of the ESA reinforces this focus by requiring EPA to ensure that its discretionary actions do not jeopardize listed species. Examples of these CAA provisions include the following:

 National secondary ambient air quality standards for criteria pollutants are to protect the public welfare from any known or anticipated adverse effects.

 The Administration is authorized to list hazardous air pollutants that cause "adverse environmental effects," which is specifically defined to mean "any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species Emissions standards for hazardous air pollutants are to require the maximum achievable reduction in emissions, taking into account various factors, including environmental impacts.

• EPA is obligated under the CAA to conduct a research program, in cooperation with the Fish and Wildlife Service and others, to evaluate the short- and long-term cause, effects, and trends of ecosystems damage due to air pollution. The program's elements are specifically to include evaluation of the effects of air pollution on biological diversity and on terrestrial and aquatic systems.

• The purposes of the program to prevent significant deterioration in air quality specifically include the protection of public welfare from any actual or potential adverse effects due to air pollution, notwithstanding attainment and maintenance of all national ambient air quality standards.

• EPA has discretion under the CAA to consider ecological impacts in many additional provisions relating to mobile sources, acid deposition control, stratospheric ozone protection, and renewable energy and energy conservation incentives.

Our Superfund program supports the goals of the ESA through formal consideration of specific impacts in the site assessment and remediation process. During site assessment, EPA evaluates threats to sensitive and critical habitats for Federally-listed endangered or threatened species. Ecological risks (including risks posed by the site to an endangered or threatened species, or the habitat of such species) can be sufficient for a site to qualify for inclusion on the National Priority List (NPL).

Further steps are taken once a site is identified as an NPL site. The National Contingency Plan (NCP), in a number of places, specifically requires EPA (or the lead agency at a Superfund site) to work with Natural Resource Trustees to protect the environment. The Trustee for endangered species is usually DOI or NOAA. Furthermore, when scoping the extent of damage caused by a hazardous waste release and selecting potential cleanup alternatives, the NCP requires that "environmental evaluations shall be performed to assess threats to the environment, especially sensitive habitats and critical habitats of species protected under the ESA." As part of this scoping, an Interagency Review Letter is sent to FWS and NMFS to determine whether there are Federal endangered species in the study area that are likely to be impacted.

The Agency has identified a number of Superfund sites where endangered species reside in the study area and are likely to be impacted. Where endangered species are likely to be impacted, EPA will ensure that State and Federal trustees of the affected natural resources have been notified in order that the trustees may initiate appropriate actions. EPA will also ensure that in the Remedial Investigation/Feasibility Study environmental evaluations will be performed to assess threats to the environment, especially sensitive habitats and critical habitats of species protected

under the Endangered Species Act.

In addition, EPA's Office of Solid Waste and Emergency Response (OSWER) continues to foster better communication and cooperation with other Federal agencies in the matter of national resource damages. Consultation is a regular part of the CERCLA process where an endangered or threatened species is potentially affected. In addition, OSWER and the FWS are discussing the possibility of entering into a Memorandum of Understanding (MOU) which would establish how each agency's responsibilities toward protecting endangered species are to be met. Most EPA regions have already initiated these procedures through Biological Technical Assistance Groups. The membership of the Assistance Group usually includes biologists from NOAA, DOI and State agencies. The Groups provide assistance to Remedial Project Managers on a variety of site-specific environmental issues, including endangered species.

EPA's Office of Pesticide Programs also promotes species recovery by providing pesticide expertise for interagency efforts. Pesticides can and have been used to benefit endangered species, e.g., spot application of herbicides for noxious weeds which

are invading endangered plant habitat.

#### Consultations with the Services

The Office of Water has successfully consulted with the Services on several occasions and I would like to point out a few examples.

EPA successfully concluded ESA Section 7 consultation with the Fish and Wildlife Service on South Dakota's assumption of the National Pollutant Discharge Elimination System (NPDES) program. On December 15, 1993, FWS concurred on EPA's finding of no adverse effect, ending informal consultation which was initiated on August 25, 1993. South Dakota, EPA and FWS agreed to a process where the State and FWS would work through any concerns, but would provide for elevation of the issues to EPA in its oversight capacity of the State's NPDES program, if necessary.

EPA is engaged in preliminary discussions with the Services over Florida's and Oklahoma's proposed assumptions of the NPDES program, and will continue to work with the Services regarding other NPDES program activities. EPA also is working to improve our already existing process of complying with Section 7 con-

sultation requirements on EPA-issued permits.

On January 6, we proposed to promulgate water quality standards applicable to the San Francisco Bay/Delta to protect Delta Smelt and the winter-run Chinook Salmon, which are listed as threatened. The Sacramento Splittail was simulta-

neously listed by FWS as threatened. These proposals were the result of close and continuing cooperation between EPA, the Services and other Federal agencies. This effort involved creating a joint Federal strategy to address both CWA and ESA requirements, and incorporated the concept of an ecosystem approach to water quality standards for the estuary. We are also actively engaged in 17 ongoing informal consultations regarding water quality standards in other States, have completed one formal consultation, and one is still in progress.

These examples illustrate how EPA's Office of Water has constructively worked with the Services to resolve procedural issues or conflicts that might interfere with

our responsibility to protect threatened and endangered species.

The Office of Pesticide Programs (OPP) has been consulting on the use of pesticides for a number of years and functional consultation procedures already exist. The Program currently reviews every new application for pesticide use for endangered species concerns in accordance with ESA Section 7. In addition, the Program has consulted, or is in the process of consulting, on some 120 previously registered

active pesticide ingredients.

In response to the 1988 ESA amendments, OPP has cooperated with the FWS and the Department of Agriculture to develop an Endangered Species Protection Program designed to protect listed species from potential harm due to pesticide use, while meeting the pest control needs of the agricultural, commercial, and public health communities. A Federal Register Notice announcing the initiation of the program and describing how it will be implemented is due for publication early next year.

OPP is also operating a program which encourages States to develop their own plans to protect endangered species from pesticide use. When appropriate, such State-initiated plans have been adopted as part of OPP's Federal program. State-initiated plans may also include the cooperative development of landowner agree-

ments to protect listed species on private lands.

In an unprecedented cooperative effort, OPP recently began working with several pesticide registration applicants to gather more specific and detailed species/crop association information. Such information is needed to assess risk and fully meet Section 7 consultation responsibilities. Initial participation and support from the pesticide companies have been encouraging.

## Continued Cooperation With the Services

There are a number of areas where we need to continue working with the Services to ensure that we are effectively using our resources to achieve environmental results. I expect us to successfully use our combined authorities effectively to meet the objectives of the Endangered Species Act. I am concerned that we and the Services develop an effective means to implement the various water laws dealing with water

quality, wetlands protection and the ESA.

Working with the Services to develop procedures to satisfy our Section 7 obligations in various programs in the ecosystem/watershed context can do much to focus our attention and resources effectively to protect threatened and endangered species. We need to be willing to use the flexibility in the ESA to tailor each consultation to the action before us. The details of consultation on a general program approval or a national regulation may be different from a consultation on a discrete construction project or site-specific action with a direct impact on threatened and endangered species. We, and the Services, are committed to continuing our positive work on these and other issues.

### Conclusion

The Endangered Species Act is an effective tool as we build on our efforts to improve environmental quality. In turn, we will continue to seek innovative and effective ways to enhance the conservation of threatened and endangered species.

Thank you for this opportunity to testify regarding the Endangered Species Act.

# STATEMENT OF MARC BRINKMEYER, AMERICAN FOREST AND PAPER ASSOCIATION

Mr. Chairman, and members of the subcommittee, I am Marc Brinkmeyer, owner of Riley Creek Lumber Company, in Laclede, Idaho. I am not here to testify today

because I am an expert on the Endangered Species Act (ESA). I am here to report the devastating social and economic impacts this Act is having on my community and offer some balanced, common sense solutions.

In addition to representing Riley Creek Lumber, I am here today to testify on behalf of the Intermountain Forest Industries Association (IFIA), the American Forest & Paper Association (AF&PA) and the Endangered Species Coordinating Council (ESCC). Accompanying me to assist with your questions is Becky Thomson, counsel to AF&PA.

The American Forest & Paper Association is the national trade association of the forest, pulp, paper, paperboard, and wood products industry. The Intermountain Forest Industries Association is a regional trade association of the forest products industry in the Rocky Mountain West. Both associations have many members who are wholly or partially dependent on timber from the national forests and other Federal lands.

The Endangered Species Coordinating Council is a coalition of more than 200 companies, association, individuals and labor unions involved in ranching, mining, forestry, manufacturing, fishing, and agriculture. The ESCC is seeking to obtain workable procedures and positive incentives in the ESA which promote conservation of wildlife in a way that considers economic factors and respects the rights of private property owners without impairing its fundamental commitment to protect listed species. The Council will also submit a statement for the record on its own behalf at a later date.

Unlike most small mill owners, neither tradition, inheritance, nor luck led me into the forest products business. I am in the business simply because it has been a dream I have carried from my childhood in Hubbard, Iowa. Since my ancestors brought their farming traditions from Germany 130 years ago, our family has maintained close ties to the land. Working in the forest industry has allowed me to continue and deepen this heritage. In less than 15 years, I believe that I have been able to promote responsible land stewardship and build one of the finer sawmills in the Inland Northwest. Our financial returns have all been reinvested in efficient, new technologies and sound, forest management.

Riley Creek Lumber is in Idaho's northern Panhandle, with only 60 miles separating us from the Canadian border. Logging and forestry have deep roots in our region. For over a century we have actively managed our forests and built thriving communities, while maintaining clean, swift streams and productive forestlands. Even outsiders have begun to take notice of the remarkably healthy and vital lives we enjoy. One of the larger towns in our neck of the woods, Priest River (population 1400) was recently proclaimed one of the top ten retirement communities in the U.S. If we still controlled our own destinies, I have no doubt that such accomplishments and recognition would continue.

However, more than half the lands in the northern Panhandle are federally owned and predominantly managed by the Forest Service. On these lands, rapidly expanding restrictions generated by the ESA have placed the foundation of our communities and the forest products industry in jeopardy. On the 378,000 acre Priest Lake District of the Idaho Panhandle National Forest more than 80 million board feet of timber are grown each year. Because these lands have recently been designated grizzly bear recovery areas, only 2 million board feet are now annually harvested. Ironically, only 60 miles away, but still within their home range, these same bears are hunted in Canada.

A recent Forest Service plan has amplified the crisis by ensuring that the practice of forest management becomes a cultural relic through plans to obliterate 125 miles of roads, and restrict use of 160,000 acres of the Priest Lake District. The Forest Service maintains that eliminating roads is necessary to meet Grizzly Bear Recovery Plan recommendations of 70 percent security habitat. If 70 percent security is not achieved, the Forest Service claims U.S. Fish and Wildlife Service will issue "jeopardy" opinions that prevent timber harvest. Using this rationale, the Forest Service embarked on an Environmental Assessment that proposed eliminating 2/3 of the roads on 85,000 acres that are largely managed for timber production.

Were the local people consulted? Yes. Were there concerns addressed? Emphatically, NO. Despite hundreds of comments from local citizens on the devastating im-

pact this proposal would have on employment, school funding, and county services, the Forest Service produced a range of alternatives that varied between eliminating 61 percent and 67 percent of existing roads. The Forest Service expected a "much reduced timber supply," reduced recreation opportunities, and negative economic impacts from all alternatives. But in direct conflict with the National Environmental Policy Act, the Agency developed no alternatives that addressed these issues. Once again, Federal agencies used the Endangered Species Act to ignore public concerns and develop a single issue agenda.

Attaining an arbitrary standard—70 percent security habitat solely through road closures—became the Forest Service's goal, not reducing grizzly bear mortality. Surprisingly, there is no scientific research to support this standard. Its origin was a 1982 internal, Forest Service report published without peer review. Unfortunately, the Endangered Species Act has no provisions that prevent bad and/or outdated science from shaping agency policy. In fact, the administration of the Act actually drives agencies like the Forest Service to seize and improperly rely upon arbitrary and ill-conceived standards in order to avoid interaction with the Fish and Wildlife Service and receive the expected jeopardy opinion.

Ironically, and tragically, closing dozens of roads to achieve 70 percent grizzly security around Priest Lake will diminish, not enhance grizzly bear security. People, not roads, kill grizzly bears. By refusing to address the economic concerns of local communities, the Forest Service has forced our people into an adversarial relationship with the bear, rather than a cooperative relationship with conservation efforts.

I cannot condone resisting good-faith and well-founded conservation efforts. I support the ESA, but I cannot support legislation that all too often pits wildlife against people. Although many interest groups claim that giving greater weight to human needs will weaken the Endangered Species Act, those of us that live with endangered species recognize that, for rare species to persist, we must integrate the needs of wildlife with people.

I enjoy the variety of wildlife in northern Idaho and want my grandchildren to

have the same opportunity. But we need legislation that promotes balance.

The past decade has demonstrated that large Federal bureaucracies using excessive regulations to protect species, spend more money fighting with each other and the public than implementing common sense programs. If our states and communities were more involved in a cooperative effort to manage endangered species, gridlock would end, innovation would be encouraged, and I have no doubt that more than 6 species would be recovered in 20 years. In the Idaho Panhandle there are numerous mill owners and other landowners, like me, that are committed to backing up our talk with action. If gates need to be installed on Federal lands to protect grizzly bears, we will help buy and install them. But we need to be full partners managing endangered species in our own backyards.

A revised Endangered Species Act must include provisions that insure that the best available science guides listing decisions and recovery plan recommendations. If peer review is a prerequisite for a study to be published in a scientific journal, should it not be required for listing decisions and plans that can influence the economy of an entire region and determine a species fate? The days of an arbitrary, unsubstantiated standard masquerading as real progress toward species recovery—

while shutting down a region's economy-must end.

Although the Forest Service has stated that Ecosystem Management will now guide its actions, when it comes to managing endangered species the Agency is still practicing single-species management. A revised Endangered Species Act must promote multi-species conservation plans that recognize our forests are dynamic and require active management to remain in balance. In Idaho, this year's devastating wildfires demonstrated that hands-off management not only eliminates jobs, but also destroys habitat for endangered species like the Salmon and Steelhead. If Ecosystem Management really guided plans to increase grizzly bear security around Priest Lake, I am confident that innovative solutions for protecting bears, sustaining healthy forests, and maintaining vital, rural communities would emerge.

In other parts of Idaho there is new concern over the ESA because of a new court decision finding the Forest Service and the National Marine Fisheries Services con-

sultation process for the salmon to be invalid.

While salmon do not spawn in the Priest Lake area, I have watched as the Forest Service and the National Marine Fisheries Service have spent the better part of 2 years working out an elaborate, multi-million dollar process for evaluating forest and range management actions on the salmon. Now the Court says they didn't do it right. The *Pacific Rivers* decision found that if a new species is listed, ESA consultation on individual forest activities is not enough, now the whole forest plan must undergo formal consultation as well. And, while that plan consultation is going on, for 6 months—1 year, activities on the forest may be enjoined. This case should make us all pause to consider if the ESA in its current format does not require the Federal agencies to engage in endless consultation, without conclusion.

I am also concerned about what this decision means in the long term. If the bull trout, or any other species, is listed next month, does that mean all woods work is immediately stopped until elaborate inter-government agencies consultations are

completed? If so, this is a process without practical end.

Crisis management rarely succeeds. Endless discussions and confused deliberations seldom produce results. In the case of the ESA, both have generated failure. A revised Act must establish incentives for state and local governments to develop and implement plans that prevent rare species from reaching the point where listing is necessary.

If I can leave you with one final thought, the lesson from Priest Lake is simple: empower local communities, require sound science, and integrate the economic needs of our communities. With those ingredients, a revised Endangered Species Act will have a bright future. You have nothing to lose, we will get the job done and you will get the credit.

## STATEMENT OF CHIPS BARRY, WESTERN URBAN WATER COALITION

Chairman Graham, members of the Subcommittee, I want to thank you for holding this hearing on Endangered Species Act implementation by Federal agencies.

My name is Chips Barry, and I am the Manager of the Denver Water Department. I am also the Treasurer of the West Urban Water Coalition, and I am here today to testify on behalf of the Coalition.

### Introduction to the Coalition

The Western Urban Water Coalition (WUWC) consists of the largest urban water utilities in the West, serving 18 metropolitan areas in seven states and over 30 million western water consumers. It is in our service areas that the most significant population and economic growth in the West has occurred over the past two decades. And it is in the watersheds that we depend upon for our water that some of the most significant and complex challenges under the ESA have arisen.

The Coalition has a strong interest in improving ESA implementation. Both individually and as a group, Coalition members have been active on ESA issues for some time. To illustrate the breadth of our experience with ESA, I will mention just a few examples of the issues Coalition members are involved in. I will then discuss the WUWC's recommendations for improving Federal agency ESA implementation and briefly review the WUWC's general recommendations for ESA reauthorization.

## WUWC Member Experiences with the ESA

In the Pacific Northwest, Seattle Water is developing a multi-species HCP for the Cedar River watershed, involving listed species including the spotted owl, marbled

¹The WUWC represents the following urban water utilities: Arizona—City of Phoenix; California—Central Basin Municipal Water District and West Basin Municipal Water District, Contra Costa Water District, East Bay Municipal Utility District, Los Angeles Department of Water & Power, Metropolitan Water District of Southern California, San Diego County Water Authority, City and County of San Francisco Public Utility Commission, Santa Clara Valley Water District; Colorado—Denver Water Department; Nevada—Big Bend Water District, Las Vegas Valley Water District, Southern Nevada Water Authority, Westpac Utilities; Oregon—City of Portland, Bureau of Water Works; Utah—Central Utah Water Conservancy District, Metropolitan Water District of Salt Lake City; and Washington—City of Seattle.

murrelet, and candidate species such as the bull trout and several salmon species. Seattle has been working actively with the U.S. Fish and Wildlife Service (FWS) and more recently, the National Marine Fisheries Service (NMFS), to get feedback and guidance on the HCP. Lately, EPA has been identified as another Federal agency that may have approval authority over the Cedar River watershed HCP.

For the Hiram Chittenden Locks, which control boat passage and salt water intrusion into Lake Washington, Seattle has been working closely with the Corps of Engineers for two reasons. First, because of the declining steelhead trout populations and because of the Corps' operation of the lockage facilities, the Corps must participate as a full partner in protecting and recovering the steelhead run. Additionally, the Corps claims primacy for the operation of the Hiram Chittenden locks for navigation purposes over use for drinking water supply. During months of peak water use, Seattle Water must constantly discuss with the Corps and other resources agencies agreements for adopting instream flow management schemes which will protect fish, allow adequate drinking water yield, and continue lockage operations for boats.

Also in the Pacific Northwest, Portland Water Works is engaged in a long range water supply planning process to evaluate three regional alternative sources of supply. Selection of a preferred alternative will be greatly affected by the presence of the Northern Spotted Owl in the Bull Run Watershed, and by the extent to which it will be possible to obtain water rights on the Columbia and Willamette Rivers, or exercise existing water rights on tributaries. Given the potential listing of several species of salmonids in the lower Columbia River and its major tributaries, these will be difficult decisions. Two of the reservoirs on the Bull Run that presently serve as Portland's source of supply are located in a National Forest, and Portland must deal with the Forest Service, in addition to FWS, in negotiating impacts to owl habitat from both existing and planned projects.

In California, Coalition members including the East Bay Municipal Utility District, City of San Francisco, Metropolitan Water District, and the Contra Costa Water District are engaged in efforts to achieve an ecosystem-wide conservation and management plan for the San Francisco Bay/Sacramento-San Joaquin Delta estuary to resolve conflicts involving winter run chinook salmon, the Sacramento splittail, and the Delta smelt. The Bay/Delta will need a coordinated ecosystem, multi-species approach to ensure that regulations to solve conservation problems do not create other insurmountable problems for agencies that supply drinking water to cus-

tomers and water to California's agriculture industry.

In southern California, the Metropolitan Water District and the San Diego County Water Authority have been involved in a variety of ESA implementation initiatives for species such as the California gnatcatcher, the Stephen's kangaroo rat and numerous other species listed or under consideration for listing pursuant to the ESA. For example, the Metropolitan Water District participated along with the Riverside County Habitat Conservation Agency (RCHCA) in the successful development of a multi-species HCP for the gnatcatcher and 15 other sensitive species found in the impact area of the District's Domenigoni Valley Reservoir Project and its associated support facilities. This multi-species HCP supports a large, regional multi-species reserve to be governed by consensus of five agencies, and is the basis for future section 10(a) incidental take permits should any of the 15 sensitive species be listed under the ESA.

Moving inland, Coalition members such as the Central Utah Water Conservancy District, Denver Water, the City of Phoenix, and the Las Vegas Valley Water District are actively participating in efforts to resolve ESA problems presented for aquatic species such as the razorback sucker, humpback chub, bonytail chub, Colorado squawfish, and the pallid sturgeon; terrestrial species such as the desert tortoise, and the American burying beetle; and bird species, including the whooping crane, least tern, and piping plover. The watersheds of the upper and lower Colorado River, the Platte River, and the Virgin River are all effected.

In Las Vegas, for example, the Southern Nevada Water Authority has water rights pending on the Virgin River in Nevada which flows into Lake Mead from the North. Four fish species in the Colorado River are federally listed as endangered—the razorback sucker, the humpback chub, the bonytail chub, and the Colorado

squawfish. Furthermore, the majority of the Colorado River has been designated as critical habitat. In the Virgin River, two fish species are listed as endangered—the woundfin and the Virgin River chub—and a third, the Virgin River spinedance, has been proposed for listing as threatened. As part of its plan to meet its increasing water demands, Las Vegas has proposed to establish a right to Virgin River water by withdrawing water from Lake Mead rather than diverting it directly from the Virgin River. If Las Vegas is allowed to withdraw from Lake Mead, many of the environmental consequences of a direct withdrawal from the Virgin River could be avoided. Las Vegas is negotiating with several agencies as it seeks to move forward with its plans.

Also on the Lower Colorado, the Metropolitan Water District and other California Colorado River water contractors are funding, along with the States of Arizona and Nevada, a feasibility study to evaluate potential programs to resolve ESA issues in

the Lower Colorado River.

In the Upper Colorado River Basin an interagency consortium of Federal, State, and private groups have come together to develop a program to recover the endangered fish in the upper basin while allowing future water development to proceed in compliance with the Act. The endangered fish addressed in the Plan for the Upper Colorado include the Colorado squawfish, razorback sucker, humpback chub, and bonytail chub.

## The WUWC Position Paper on ESA Reauthorization

In recognition of the importance of the ESA requirements and its implications for our ability to provide a reliable, high quality supply of water to urban areas, the Coalition formed an Endangered Species Act Committee to examine ways that the ESA may be implemented, and if necessary, changed, to accomplish its conservation ethic without unnecessarily impacting the urban water suppliers in the West. The WUWC Endangered Species Act Committee produced a Position Paper on Reauthorization of the Endangered Species Act which has been widely distributed and favorably received by members of Congress, Administration officials, and representatives of environmental organizations. The WUWC Position Paper identifies four general areas of concern and makes a number of recommendations for improvements in the traditional manner in which the ESA has been implemented. First, the Paper recommends that mitigation and recovery programs initiated pursuant to the ESA be broadened from single species to multiple species conservation efforts in order to foster ecosystem preservation. Traditional ESA programs emphasize single species efforts, often initiated only when species are facing extinction. This may allow habitat modification that is detrimental to other coexisting species. In addition, it can delay protection until the capacity of a habitat to support a diverse biota is severely compromised. In its Position Paper, the WUWC recommends that agencies encourage multiple species habitat conservation plans, incidental take permits, and similar initiatives as a discretionary alternative to single species recovery plans.

Further, the WUWC Paper recommends that proactive conservation initiatives be used to resolve species conservation problems before species are listed as threatened or endangered. Proactive implementation of ESA programs would foster a consensus approach and would also avoid the delays that result from the present listing and recovery processes which are often adversarial in nature. The WUWC paper recommends that the FWS and the NMFS be authorized to enter into pre-listing agreements and to offer incentives to develop programs that enhance habitats on a multi-

species basis.

The WUWC Paper recommends that a consistent and accountable decision process be used to execute provisions of the ESA. Greater confidence in the credibility and consistency of ESA decisions reduces the hesitation of agencies, developers and the public to participate in the ESA process. Equally important, ESA programs based on sound technical information and objective decision-making provide the most cost-effective use of limited resources. In the Paper, the WUWC recommended that there be agency regulations and guidelines that require agencies implementing ESA programs to develop comprehensive, step-by-step procedures to guide agency decisions and public participation in all key aspects of ESA implementation, including recovery plans, listing decisions, biological opinions and critical habitat designations. In

addition, the Paper recommends that mechanisms be developed so that stakeholders can provide technical assistance to Federal agencies in undertaking analysis of biological data, public comments, and other information needed to make responsible and accountable decisions under the ESA.

Finally, the WUWC Paper recommends that implementation of conservation programs be better prescribed and managed. One frustration with the ESA is that recovery efforts are not always implemented expeditiously or effectively. Delayed recovery efforts place species and habitats at greater risk, and require more extensive and costly actions when the efforts are initiated. The WUWC recommends that there be a requirement that conservation and recovery programs be more detailed, and the requirements for content, recovery milestones, and mid-course progress evaluations be prescribed, along with projected time frames for ultimate recovery and delisting.

To further ESA implementation improvements and follow up on the Position Paper, the WUWC ESA Committee is sponsoring an ESA Workshop in San Francisco in October, which will feature discussions with officials from the FWS and NMFS. The purpose of this workshop is to discuss ESA-related issues, to make recommendations for improving and strengthening the implementation of the ESA, and to learn of ways in which Coalition members can play a more effective role in Federal decisionmaking.

## Recommendations for Federal Agency Implementation

Most of the ESA issues in which Coalition members are involved present problems that affect numerous parties, involve multiple species, and are most effectively addressed through ecosystem-based solutions. The water resources at issue are, even without the needs of endangered species, subject to competition for municipal and agricultural uses, power production, and the protection of water quality and other environmental values. Federal application of the ESA has heightened the competition by requiring that water be diverted or reserved, or present uses changed, in order to avoid jeopardy to, or promote the conservation and recovery of, species protected under that law. As a result of all these competing demands for the finite water resources of the West, there simply is not enough water to go around.

These competing demands for water are on a collision course. To use Secretary Babbitt's terminology, there are "train wrecks" in the making. Some have already occurred, and in the experience of some Coalition members, some have been avoided. However, there may be ways to solve old problems and to prevent new ones. In this testimony, the Coalition will offer its general recommendations on how to recover listed species without placing at risk the water supply of millions of residents of western urban areas.

The Coalition believes that what is good and bad with ESA implementation by Federal agencies can be broken down into five general themes: l) consistency in Federal practices and policies; 2) cooperation with State and local entities and affected user groups; 3) ecosystem management; 4) sound analysis of technical issues; and 5) flexibility and creativity in dealing with resource management conflicts. Although these themes are set forth in the context of this hearing on implementation of the ESA on Federal lands and waters, they apply generally to private lands as well. Each of these will be addressed separately.

1. Federal Consistency—As noted above, Coalition members have been involved in a wide variety of ESA problems involving numerous species, a wide variety of geographic locations, and several Federal agencies. From this perspective we have frequently observed a disturbing lack of consistency in decision-making among Federal agencies and even within the same agency.

On relatively frequent occasions, FWS and NMFS adopt inconsistent positions on ESA issues regarding what is acceptable for mitigation, and what is relevant in defining what constitutes a "species" for ESA purposes. In some cases, separate field offices for the same agency will adopt positions that are in conflict with each other. Denver Water is familiar with one such situation. In this case, one FWS field office has taken the position that metropolitan Denver water users should relinquish conditional water rights on the Colorado River and replace these losses to Denver's water supply by transferring agricultural rights to urban use in the South Platte

Basin. At the same time, another FWS field office is calling on South Platte water users to relinquish historic yield from the South Platte River projects to meet downstream ESA needs in Nebraska. These interests on the South Platte obviously cannot make the same water appear in two places at the same time. And in any case, the agricultural community wants the water left in agricultural use, with nothing diverted to either metropolitan Denver or Nebraska. The result is a Federal agency that is in conflict with itself. One field office wants metropolitan Denver to develop rights on the South Platte. The other wants South Platte rights relinquished so that more water remains instream. Inconsistencies like this make it difficult for WUWC members to know how to respond. It also produces confusion and conflict among affected parties. There is no legitimate excuse for such inconsistency—the Federal agencies responsible for ESA implementation should "sing from the same sheet of music."

The Coalition is optimistic that recent actions taken by the Departments of the Interior and Commerce to coordinate their implementation efforts will bring greater consistency to Federal actions. The six policy statements published jointly by the FWS and the NMFS on July 1, the HCP assurance policy issued last month, and the interagency MOU announced yesterday are a good start toward achieving greater consistency nationwide. The Federal agencies are doing a somewhat better job of coordinating decision-making on regional ESA problems. Examples are the interagency consortium for endangered fish in the Upper Colorado River Basin, the HCP Program Office for the Pacific Northwest, and the Federal Ecosystem Directorate ("Club Fed") that is addressing ESA problems in the Bay/Delta region.

The Coalition commends the Administration for these efforts, but more needs to be done. The recently announced policies must now be implemented in a consistent manner at the field staff level. Detailed guidance is needed to effectively apply them. The ESA should be amended to reflect these new policy guidelines. Multiagency teams are needed for other regions, especially if ecosystem approaches are to succeed. This is particularly true for the Lower Colorado/Virgin River and the anadromous fisheries issues in the Pacific Northwest.

Finally, even where coordinating mechanisms have been established, revisions are sometimes needed. For example, the effort to achieve a coordinated response to Bay/Delta problems is hindered by the absence of FERC from the Club Fed. Their absence has created the potential for conflict among FERC, the Fish and Wildlife Service and hydroelectric project owners over the applicability of the section 7 consultation process. Presently, such issues are being addressed by FERC on a case-by-case basis, rather than from the ecosystem-wide perspective that Club FED is using to address other issues related to the Bay-Delta standards.

As a single event, differences between FERC and FWS over interpretations of ESA requirements in the Bay/Delta could delay much needed protection of endangered and threatened species, and increase the water costs for hydroelectric project owners without any discernible environmental benefit. Moreover, as a precedent for establishing FWS and NMFS authority over hydroelectric project licenses, this example assumes national importance and underscores the need for all appropriate agencies to work collaboratively in ESA conservation efforts.

2. Intergovernmental Cooperation—The solution to many ESA problems does not rest with federal action alone, even in cases where the focal point of species conservation measures is on federal land. Species do not respect government boundaries, and they do not read the Federal Register. Cooperation and coordination of federal, state and local agencies, and user groups is essential.

Recently, Secretary Babbitt took the initiative to establish a Memorandum of Agreement with the Governors of Colorado, Wyoming and Nebraska to develop a recovery program for central Nebraska's water dependent endangered species along the Platte River. In addition, FWS and NMFS also have issued a new policy statement to enhance state agency participation in federal ESA initiatives. These are steps in the right direction, but additional measures are needed.

The new FWS/NMFS policy should be broadened to include other qualified participants. Under the literal terms of this policy, the Western Urban Water Coalition could not participate, even though we represent local government entities, have

enormous physical and financial resources at stake, and substantial expertise to contribute.

It is clear that most ESA problems cannot be broken down into those that occur only on: 1) Federal lands; 2) State lands; 3) private lands; 4) Western Urban Water Coalition members' lands; or 5) any other artificially defined category. Comprehensive solutions will require comprehensive, multi-party cooperation. The Federal agencies charged with ESA implementation must take the lead in promoting this result. Consistent with the MOU announced yesterday, other agencies, not merely FWS and NMFS, should be emphasizing interagency cooperation and participation. Congress can assist by creating greater incentives in the Act for such cooperation, such as expanding the provision of section 6 dealing with cooperative agreements to also allow such arrangements with local government entities and, of course, water utility districts.

3. Ecosystem Management—Virtually all of the problems Coalition members are involved in require ecosystem-based solutions. The single-species fix is a thing of the past. The Coalition is pleased that the concept of ecosystem solutions are now being discussed. Everyone is for it, but how can it become a reality?

An ecosystem approach will place even greater demands on the Federal Government. The need for coordination and cooperation will be at a premium. So too will be the need to work effectively with user groups and other affected parties.

The ESA needs to be amended to promote ecosystem-based solutions by, for example, authorizing pre-listing agreements to encourage HCP's and making ecosystem management an express purpose and policy of the Act. Ecosystem considerations also need to make their way into section 7 biological opinions. Protecting and enhancing an ecosystem that is the home for a number of listed and to-be-listed species that may have competing biological needs will likely require compromises in the level of protection provided to individual species. If section 7 biological opinions continue to focus exclusively on single species protection at the expense of the regional ESA goals, the concept of ecosystem management may become meaningless. The same can be said for recovery plans developed under section 4 of the ESA. If ecosystem management is to work, it must be applied consistently and predictably throughout all of the requirements of the ESA.

4. Sound Technical Analysis—As this Subcommittee is well aware, it is easy to find examples of actions taken under the ESA that are based on questionable scientific premises or, where required, on insufficient or even no analysis of economic consequences. In part, these problems are the result of inadequate staffing and funding resulting in inadequate analysis. These problems also can occur because of inappropriate result-oriented decisionmaking and the failure to consider the best available data.

A greater commitment to peer review and allowance for submission of relevant information by outside parties will reduce the number of indefensible Federal decisions under the ESA. The FWS and NMFS have improved the situation with the new policy statement on peer review for listing and recovery decisions. Those principles should be carried forward to other ESA decisions such as section 7 consultation and critical habitat designation.

Of course, every effort must be made throughout the Federal chain of command to ensure that decisions under the ESA are based on sound science and economics, not on the personal policy preferences of staff biologists.

In addition, Congress must ensure that adequate funds are available to carry out the mandates of the Act. This lack of funding has been a major limiting factor with new salmon listings.

5. Flexibility and Creativity—ESA problems can be dealt with effectively by trying new approaches and solutions to old problems. FWS and NMFS must be willing to try new approaches. We want the Federal agencies to work with us on solutions that allow us to protect species under the ESA and continue to supply water to the people of the West. We need flexible solutions such as off-site mitigation, mitigation banking, and adaptive management, which allows affected parties to take action now and then monitor and change operations in the future when impacts are better understood.

Denver Water's example on the South Platte demonstrates the advantage of using creative approaches to ESA issues. By searching for alternatives to the traditional demand for "more water in the river," a more effective and achievable program is possible in this situation. A more creative solution would be joint hydrologic and operating studies to determine how more water can be made available to the critical reaches of the South Platte River by alterations in the timing of storage, diversion, and exchange and use of water. All affected water users plus the Federal agencies and respective states need to participate in such studies, which are technical and not political in nature. The best results are most likely to be achieved if FWS and NMFS broaden their perspective, work with affected parties to search for more creative solutions, and act consistently within and between agencies.

#### CONCLUSION

Overall, the Coalition is pleased by some of the progress that is being made by the Federal agencies in reforming ESA implementation. With additional administrative efforts and some minor changes in the Act, the ESA can become useful conservation legislation that does not needlessly stifle resource development or curtail present uses. The trend must continue, however, and the various WUWC members are prepared to assist in any way possible. Thank you.

# STATEMENT JUDY GUSE-NORITAKE, PACIFIC RIVERS COUNCIL

My name is Judy Noritake. I am the National Policy Director for the Pacific Rivers Council. We are headquartered in Eugene, Oregon and have offices in Portland, Seattle, Montana and the Washington, D.C. metropolitan area. Our organizational objective is the development of watershed-based protection and recovery strategies for aquatic ecosystems and sustainable community development associated with healthy aquatic systems throughout the country.

We recently initiated litigation to ensure the proper implementation of the ESA on federal lands in northeast Oregon and Idaho to save the listed Snake River chinook salmon. Given our experience in this litigation, our comments today will focus on our assessment of how the various Federal agencies have responded to their duties under the Endangered Species Act as it is currently written. We also offer a

few suggestions for improvement.

Reform of federal land practices in the Northwest region were defined in the late 1980's and early 1990's by debate over the listing of the northern spotted owl under the provisions of the Endanger Species Act. In the Northwest, and in many other parts of the country, much of this reform focus has now turned to aquatic ecosystems and fish, both anadromous (migratory species) and resident species. This is not surprising given that scientists now estimate aquatic species are disappearing at a much faster rate than terrestrial species. The Forest Ecosystem Management Assessment Team report (FEMAT) in 1993 stated that 3645 species and subspecies of native fish are in need of special management considerations because of declining populations. Since 1910, the Columbia River system salmon and steelhead runs have declined 85 percent if hatchery runs are counted, and 95 percent if, as is more appropriate, only wild runs are considered. This decline is not surprising if one considers that the cumulative effects of land use in a watershed show up first at its lowest point-the bed of the stream or river. Logically, the fish are among the first to go. This is why we believe aquatic species will be a focus for much of the debate to come about the lawfulness of management practices on federal lands across the country.

Based largely on our experiences with the Forest Service, it is our considered opinion that the federal land management agencies have not complied with the letter or the spirit of the Act as currently written. Specific issues for the land managers include: (1) their recalcitrance with regard to consultation on programmatic actions they themselves have deemed "may affect" a threatened or endangered aquatic species; (2) failure to consult adequately on project level activities for projects they categorize as "may effect" prior to initiating work; (3) their failure to consistently provide adequate biological assessments to the National Marine Fish-

eries Service; and (3) their failure to proactively confer at the candidate or proposedfor-listing stage, consistent with the intent of the Act.

Given the current crisis faced by aquatic ecosystems in the Pacific Northwest and nationwide, we cannot emphasize enough how critical the full cooperation of the federal land managers is. The federal lands, primarily the national forests, encompass most of the region's remaining healthy habitat and headwater areas. The findings of both the Forest Ecosystem Management Assessment Team and the Eastside Scientific Society Panel both led to recommendations for the protection and restoration of a network of ecologically "key" federal watersheds.

Over the last century, federal land within the range of the northern spotted owl has become increasingly important for ensuring the existence of high quality aquatic resources. . . . Thus, society's reliance on federal lands to sustain aquatic resources

continues to grow. 1

The following is taken from a U.S.D.A. Forest Service Document, Protecting and Restoring Aquatic Ecosystems: New Directions for Watershed and Fisheries Research in the USDA Forest Service. DRAFT 12/1/93. It speaks quite eloquently for a need to have higher standards for the protection and management of watersheds and aquatic resources on Federal lands across the country.

In many parts of the country, National Forests provide the only suitable habitat left in a landscape that has been heavily developed. Because these Forests serve as refugia—arks for genetic diversity—the responsibility for conserving these isolated

species may well fall to their managers."

Given these findings, there can be no doubt that the federal lands must provide

the basis for a regionwide recovery strategy.

Issues for NMFS include: First, we commend this agency's recent decision to conduct comprehensive status reviews for all salmon and anadromous trout populations in Washington, Oregon, Idaho and California. However, NMFS has displayed some shortcomings in these matters, which include: (1) the failure of NMFS to issue biologically defensible jeopardy opinions, and (2) the failure of NMFS to require an ecologically appropriate scope of the action area over which a jeopardy opinion will apply.

Areas in which the current Act could stand strengthening include: funding and prioritization; the listing and critical habitat designation processes; recovery planning; clarification of Section 9 taking to unambiguously include the adverse modification of habitat; and enforcement. Additionally, there may now be an increased consultation workload for NMFS requiring additional funds and personnel in order to accomplish consultation duties in a timely manner. We will support those additional resources any way we can.

Overall, however, we think it is important to recognize that the implementation of the ESA through the consultation and recovery planning process has been much more successful with regard to federally managed lands than it has on private lands. On private lands, new incentives for conservation of critical aquatic habitats are required, some of which can be provided through the ESA itself and some of which can and should be provided through the alignment of programs authorized under other statutes with the priorities which develop from the listing of aquatic species. In the second part of this testimony we have outlined some examples of other statutes with priorities that can provide incentives to private land owners to conserve habitat for endangered species.

The Endangered Species Act is one of the most powerful federal laws on the books, but we view it as a tool of last resort. Our organization does not use it frivolously and at any opportunity, but only with great reluctance when all other avenues have been exhausted. In fact, we firmly believe that if the Federal agencies carried out the letter and intent of other environmental laws, like the Federal Land Policy and Management Act (FLPMA), the National Forest Management Act (NFMA) and the National Environmental Policy Act (NEPA), the need to petition species for listing or to litigate on behalf of listed species would drop significantly.

The thing we must remind ourselves is that when the situation becomes bad enough that we must resort to the ESA to save a species it is not because there

<sup>&</sup>lt;sup>1</sup> FEMAT Report, July 1993, p. V-2.

is something wrong with the Endangered Species Act itself. The successful listing of a species like the chinook is a warning that something is seriously wrong with the ecosystem it depends on to survive. The citizens of the region need that same ecosystem in a healthy state to survive and the coastal salmon fisheries in the Northwest are a perfect example. The commercial salmon industry is all but shut down. Many of the stocks the industry relied on spawn in coastal streams where there are no dams to blame for decreasing runs. Habitat degradation is the acknowledged culprit in most cases. The federal government is now making payments to out-of-work salmon fishermen to compensate for what was in 1988 still a billion dolar recreational and commercial fishing industry. At the same time the government is making these payments to the fishermen, they are continuing practices which they acknowledge have adverse effects on the salmon. The ESA gives us the mechanism to say there is something wrong with this picture.

The Endangered Species Act is the most powerful legal tool available to protect aquatic species and ecosystems that have reached the brink of extinction, areas where enforcement of other land management laws has fallen short. Under no circumstances should the Act be weakened. Rather, as indicated earlier, the Act has not as yet been fully implemented by the Federal agencies. The suggestions we offer for improvements—either administrative or legislative—are based on our firm belief that a strengthened Act will also strengthen society's ability to attain and maintain

the ecological integrity upon which a sustainable economy can be built.

## I. IMPLEMENTATION PROBLEMS ON FEDERAL LANDS: A FEW EXAMPLES

A. Federal Land Management Agencies: What is the Track Record for Aquatic Ecosystems?

The Wallowa-Whitman and Umatilla National Forests: An example of foot-dragging. A review of some of the events surrounding the listing of chinook salmon in these two forests exemplifies most of our implementation concerns.

1. In March 1991, the Forest Service and other participants in a "Salmon Summit" convened by Senator Hatfield reached agreement on a series of actions intended to protect and restore salmon runs. The Forest Service expressly committed: (1) to begin implementation of the Columbia River Basin Anadromous Fish Policy and Implementation Guide (PIG) by April 1, 1991; (2) to begin designating "Desired Future Conditions" for all anadromous fish streams in the Columbia River Basin during 1991 (an activity at the heart of the "PIG" process); and (3) to determine by October 1, 1991 which land management plans needed amendment and to begin modifying them during FY 1992. Three and a half years later, those commitments remain unfulfilled.

2. The Snake River chinook salmon were proposed for listing as a threatened spe-

cies in June of 1991 and formally listed as threatened in April of 1992.

3. Section 7(a)(4) of the Act directs Federal agencies to confer with the National Marine Fisheries Service on any action that is likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat. The conference process offers an early opportunity to eliminate conflicts with endangered species without halting ongoing activities. The Forest Service did not initiate a conference when chinook were proposed for listing in June of 1991.

4. In March of 1992, the Forest Service and NMFS entered an Interagency Agreement in which they agreed to (1) cooperate in developing and implementing conservation strategies for the about-to-be listed salmon beginning within 1 year and to amend affected Forest Plans consistent with these strategies, and; (2) to conduct a biological evaluation of all proposed and ongoing activities in the Wallowa-Whitman and Umatilla Forests at the watershed level. To date, not one of the conservation strategies has reached even the draft stage. The Forest Service has received biological opinions from NMFS on only one of the 12 watersheds largely because of the agency's delays in providing sufficient information to NMFS.

5. When chinook were listed in April of 1992, the Forest Service did not initiate consultation on the existing Forest Plans for the Wallowa-Whitman and Umatilla forests. Two months after Pacific Rivers Council threatened to sue over this inac-

tion, the Forest Service and NMFS attempted to conceal the agency's violation through an exchange of letters that purported to excuse the Forest Service from is statutory obligations. Both the Oregon district court and the Ninth Circuit rejected the agencies' concerted attempt to sidestep the law.

6. Despite the Interagency Agreement and the ESA consultation requirements, in the months following listing the Forest Service proceeded with numerous timber sale and roadbuilding projects without completing consultation on these projects, all of which the agency acknowledged "may adversely affect" salmon. At least 20 such timber sales and 10 new roads were completed in the year following listing.

7. Although biological assessments were submitted for some projects, many of these could not be evaluated by NMFS due to inadequate information provided by the forests. Eventually the Forest Service and NMFS agreed to withdraw all but one biological assessment in January of 1993. The Forest Service did not supply adequate assessments to NMFS until late 1993 and, in some cases, spring and summer of 1994. Frequently, the assessments did not even include information about the status or location of salmon populations and spawning and rearing habitat in the project areas, or basic information about the projects—such as the number of trees to be logged.

8. On May 27, 1993 (almost a year after the chinook was listed), upon learning of these ongoing activities, Pacific Rivers and others moved for an injunction to halt all ongoing and future logging, grazing and roadbuilding projects that may adversely affect the listed salmon. Future activities were enjoined in October by the district court, but ongoing activities were not enjoined until July of 1994 by the 9th Circuit.8.On October 6, 1993, the federal District Court issued an order requiring these Forests to initiate consultation with NMFS on the Forest Plans. Although the Forest Service appealed this decision, no stay was granted, meaning that the agency was bound to obey the court's direction to initiate consultation. Nonetheless, consultation was not initiated until 10 months later in August of 1994, a full month after the 9th Circuit rejected the Forest Service's appeal.

In sum, as demonstrated on the Wallowa-Whitman and Umatilla National Forests, the Forest Service has consistently failed to meet its legal obligations to perform pre-listing conference or post-listing consultations at both the project and the Forest Plan levels and has consistently failed to provide adequate biological assessments to NMFS based on the "best available scientific and commercial information." Section 7(a)(2); 50 C.F.R. 402.14. The agency has also failed to meet its obligations under the March 1992 Interagency Agreement, in which it admitted that the Forest Plans are inadequate to meet the needs of the listed species.

The Six Idaho Forests: We think the same pattern of bad faith on the part of the federal land managers is also exemplified by events in the six Idaho forests with chinook habitat. Despite the fact that the lawsuit in Eastern Oregon had already determined that national forests containing critical habitat for protected fish must submit forest and project plans for consultation, the Idaho national forests failed to initiate this consultation until Pacific Rivers sought a separate injunction for these forests. Consultation on the plans was finally initiated on September 9, 1994, the same day the government was scheduled to respond to PRC's motion for a preliminary injunction. In Idaho, as in Oregon, the Forest Service has failed to develop conservation strategies for any of the 36 salmon-bearing watersheds, contrary to the March 1992 Interagency Agreement. The Forest Service has also failed to submit to NMFS any biological assessments for ongoing activities in 16 of these watersheds.

Failure to Consider Cumulative Impacts of Projects: Panther Creek on the Salmon National Forest. Claims that cumulative impacts can be analyzed solely through project level consultation where species are widely distributed throughout the forest are inaccurate and insupportable. The following example is one illustration of why this approach has failed to protect the salmon.

NMFS has issued a draft jeopardy opinion with respect to proposed activities on Panther Creek based largely on damage done to past mining activities high up in the watershed. Among the proposed projects is the Bear Track heap-leach gold mine. However, before the jeopardy opinion could formally issue (and which has still

not issued), the Forest Service submitted a separate biological assessment applicable only to the Bear Track Mine proposal, which resulted in a no-jeopardy opinion

which was unencumbered by the cumulative effects of other activities in the watershed. This situation is an example of the Forest Service's selective, non-cumulative approach to endangered species impacts analysis. When the agency wished to push through a project, it readily abandons its own process for evaluation.

B. Issues for NMFS: Biologically Indefensible "No Jeopardy" Opinions and Failure to Protect Subspecies

Jeopardy Question Litigated for the Columbia River Hydrosystem: The Idaho Department of Fish and Game and the State of Oregon had to resort to legal action against NMFS, the Army Corps and the Bureau of Reclamation to force the issue of whether the Columbia River hydrosystem jeopardizes listed fish. NMFS has consistently issued a "no jeopardy" opinion with regard to an operation that eliminates 90 percent of juvenile fish and two-thirds of all returning spawners. In separate opinions, the Oregon district court and the 9th Circuit concludes that major modifications to the hydrosystem are required to protect and recover the salmon and comply with the requirements of the ESA and the Northwest Power Act. Jeopardy Opinions Selectively, and Inequitably, Issued: NMFS has been more willing to find jeopardy with respect to tribal and recreational harvest than it has for hydrosystem operations. When NMFS threatened to eliminate the tribal harvest-a negligible impact in relation to the hydrosystem impacts—tribal harvesters had to resort to legal action to preserve their treaty rights, forcing a settlement. Similarly, the recreational fishery on all anadromous fish in the Columbia has been shut down, with significant negative impacts on the local economy. To date, it appears that those most dependent on the salmon fishery, culturally and economically, have been impacted disproportionately with other sectors with larger overall impacts on salmon viability.

Failure to Protect Subspecies Contrary to Intent of the Act: Illinois River Winter Steelhead: NMFS has interpreted the ESA to require only the protection of "species," which it defines as an "evolutionarily significant unit," in a fairly narrow way. (CITE regulations?). It appears that NMFS' interpretation of species may be used to deny protection to clearly declining subspecies otherwise deserving of protection. For example, the Illinois River winter steelhead were denied protection under this standard.

C. Conclusions: Federal Lands are Critical to Recovery Aquatic Ecosystems in the Pacific Northwest

Aquatic ecosystems in the Pacific Northwest are in crisis. Salmon production in the Columbia River system has declined to less than 5 percent of historic levels, and at least 106 major populations of migratory salmon and steelhead trout are extinct on the West Coast-many of these on the East side of the Cascade Range. Sound management of the national forests are critical to the maintenance and recovery of most of the anadromous fish that remain. For example, 14 of the 25 at-risk resident fish species or subspecies in Oregon are found in watersheds within the boundaries or immediately downstream of national forests. This is because the national forests contain the majority of the region's remaining healthy habitat and headwater areas. In light of the findings of the Forest Ecosystem Management Assessment Team and the recent Report of the Eastside Scientific Society Panel, both of which recommended the protection and restoration of a network of ecologically "key" federal watersheds, there can be no doubt that the federal lands must provide the basis for a regionwide recovery strategy.

Some of the implementation problems noted above could be addressed by clarifying the existing requirement in the Act that the reviewing agencies (FWS or NMFS) consider the cumulative effects of all related federal and not-federal activities when consulting or conferring under Section 7. The requirements for individual agency ac-

tions would be maintained.

Over time, consultation on forest and BLM district plans will hopefully accomplish these goals. Currently, consultation tends to look back at what was done before. Consultation on forest plans will require that the impacts of past, current and future activities be considered together. Also, federal actors could be moved into action

earlier if the affirmative conservation obligations under Section 2(c)(1) and 7(a)(1) were extended to Category I and II candidate species.

# II. RECOMMENDATIONS FOR STRENGTHENED IMPLEMENTATION OF THE ACT THROUGH ADMINISTRATIVE AND LEGISLATIVE ACTION

## A. Funding and Prioritization

- 1. New Funding Options Must be Provided: The implementation of the Act has been hindered by inadequate appropriations for Federal agencies, cooperative state programs and local habitat conservation planning. Although reauthorization cannot directly address the problem of inadequate appropriations pursuant to existing authorization, we feel very strongly that the Act should at least set up the framework to establish new funding mechanisms for generating revenues to be dedicated to ecosystem recovery. Targeted taxes, surcharges and user fees should be considered. States and localities should be eligible for federal loans to purchase critical habitat and/or conduct habitat conservation planning. The establishment of a permanently appropriated trust or revolving fund should be explored, perhaps similar to the National Aquatic Ecosystem Restoration Fund recently proposed by the Merchant Marine Committee.
- 2. Administrative Action: The Allocation of Scarce Resources Must be Prioritized According to Ecological Priorities. In this era of multiple listings, along with increasing fiscal constraints, it is critical that the relevant agencies develop explicit recovery priorities which include decisionmaking criteria and guidelines. These priorities should be expressed in agency rules promulgated with full public participation. Regardless of recovery priority, however, all listed species should be protect from further decline and further degradation of critical habitat. Priorities should reflect ecosystem conservation priorities, not solely species-by-species priorities.

## B. Amend Act to Place Affirmative Duty on Federal Agencies to Conserve Candidate Species

For many aquatic and riparian-dependent plant and animal species, the federal lands constitute real or potential habitat refuges. In the case of Pacific salmon, where the headwaters of most major rivers are in federal ownership, the protection and restoration of federal lands are critically important to the ultimate survival of the species that remain. Sections 2(c)(1), 7(a)(1) and 7(a)(4) could include language requiring Federal agencies to act affirmatively to protect candidate species prior to listing.

## C. Listing and Critical Habitat Designation

1. Listing Should be Streamlined. The listing process must continue to exclude economic considerations and should not, as some propose, provide an opportunity for public appeal prior to the issuance of a final listing decision. Any changes to the act which provide for peer review of listing decisions must contain an explanation of the scientific need for the review in order to avoid a review system which can be used to delay listings as well as to address legitimate scientific disagreements. The "warranted but precluded option" should be limited, as suggested by the American Fisheries Society, by allowing a warranted-but-precluded finding only once per species. (AFS Policy Statement, 1994).

2. Critical habitat should be identified only on the basis of the best scientific information. Proposals to analyze the economic impacts of listing a species during the

designation of critical habitat are misguided.

3. Backlog of Critical Habitat Designations Must be Addressed. Less than 20 percent of listed species have designated critical habitat. We suggest that the designation of critical habitat be simplified to enable speedy completion of this process. For example, agency discretion to designate habitat could be reduced so that, in the first instance, critical habitat is presumed to encompass all remaining habitat of a listed species. This would be a rebuttable presumption.

4. Listing of Subspecies and Vertebrate Populations Must be Preserved as an Option. This issue is of particular importance to the conservation of anadromous fish. We strongly believe that the Act should retain the flexibility to recognize species as eligible for listing before they are on the verge of extinction in every river and

stream throughout their range. Populations and subspecies can be defined on the basis of the best scientific expertise, but because they may lack some distinctions required to define them as evolutionarily distinct species, existing policies which prevent their conservation as "species" for the purposes of the Act should be reconsidered.

## D. Recovery Planning

- 1. Recovery Plans: Schedules, Process and Content. Deadlines for recovery plans should be clearly set forth in the Act: we suggest 18–24 months for adoption of plans after listing. This duty should not be discretionary. Whenever possible, multi-species, ecosystem-based planning should be conducted will the fullest possible participation of state resource agencies. Plans must be based on species status and ecosystem integrity, and should include clear objectives and measurable criteria to assess recovery. Habitat conservation should be given preference over captive breeding in all recovery planning.
- 2. Multiple Species Approach. If multiple listed or candidate species exist, as many species as possible should be included in a single recovery plan, which could prevent the need to list candidate species.

## E. Takings of Species and Habitat and Jeopardy Determinations

- 1. Ecosystem Conservation must be clearly established as coequal with species conservation throughout the Act and, specifically, in the Section 9 definition of "Take." Although to many scholars and advocates of the Act believe it currently treats the conservation of species on a coequal basis with the conservation of the ecosystems upon which they depend, some courts have resisted the extension of §9 prohibitions to the significant modification of habitat despite agency interpretations to the contrary. We suggest that Section 9 be amended to make it absolutely clear that the term "harm" in the definition of "take" includes the modification of habitat.
- 2. Set a Standard in the Act. The Act should clearly define "jeopardy" as any action that reduces the likelihood of either survival or recovery of an imperiled species, not necessarily both. (AFS Policy Statement, 1994). It follows that any significant reduction in the integrity of ecosystems supporting imperiled species, which clearly includes the modification of habitat or introduction of non-native species, should receive a jeopardy determination.

# F. Takings of Private Property: The Fifth Amendment Provides Adequate Protection to Private Landowners

We fully support reauthorization provisions which authorize financial incentives and technical assistance to landowners who go beyond the requirements of the law to recover listed species or prevent the further decline of candidate species. We also support funding for cooperative management agreements, voluntary conservation easements, land exchanges and outright purchases of private lands of critical import to ecosystem protection and recovery where appropriate. However, proposals which make landowners eligible for "compensation" based on a so-called "taking of private property" which is deemed to occur before Fifth Amendment compensation would be due threaten to set a dangerous legislative precedent. Any scheme which deems compensation to be due a landowner for mere diminishment of private property values or use undermines the basis of most environmental and land use laws, all of which restrict private rights in furtherance of a greater public good. Of course, where a "taking" of private property based on constitutional standards can be shown, a private landowner can and should take legal recourse to obtain due compensation.

### G. Enforcement

1. Citizen Enforcement Rights Must Not be Abrogated and Could be Strengthened. The broad standing provisions of the current citizen enforcement scheme must not be narrowed to include only those who can show immediate or tangible harm. The power of citizen enforcement could be strengthened by waiving or shortening the 60-day waiting period before suits may be filed in emergency circumstances.

2. Violators Should be Liable for Restoration Costs. Violators of the Act should be

liable for restoration costs in addition to civil and criminal penalties.

## H. Incentives to Encourage Conservation by Private Landowners

We suggest that Congress evaluation the question of whether the following types of incentives are effective to encourage aquatic habitat conservation and restoration on private lands: Preferential Treatment for Estate Tax Purposes. Congress should consider exemptions from estate taxes for the residual value of land subject to conservation easements in furtherance of an ESA recovery plan or lands on which qualified preventive measures have been taken to avert the need for listing;

Federal Income Tax Credits: Congress should consider income tax credits for costs incurred by landowners to restore land and habitat which supports and threatened

or endangered species.

Increased Federal Income Tax Deductions Through Current Deductibility of Watershed Restoration Costs: Would preferential tax treatment for road maintenance and improvement activities which benefit critical aquatic habitat encourage restorative work by private landowners? We suggest that qualified capital costs should be eligible for current-year deductions where their primary value is ecological, rather than business related.

Income Tax Exemptions for Conservation-based income: Congress should consider whether income tax exemptions for income generated through conservation-based—or "salmon safe"—farming or forestry practices which exceed otherwise applicable legal standards would be an effective means of achieving the goals of the Endan-

gered Species Act.

Property Tax Breaks for Land Dedicated to Habitat Conservation. If found to be an effective incentive, the current allowance for deduction from taxable income for local and state property tax should be converted to an outright tax credit for properties subject to an approved habitat management plan. The plan could be a long-term contracts (25 years) or a permanent conservation easement. Under certain conditions, local entities may qualify for a "payment in lieu of taxes" to partially compensate them for the decreased property tax revenues.

#### PRIMARY SOURCES

P. L. Angermeier and J. Williams, "Conservation of Imperiled Species and Reauthorization of the Endangered Species Act of 1973," 19 Fisheries 26–29 (January 1994).

B. Doppelt, M. Scurlock, C. Frissell and J. Karr, Entering the Watershed (1993).

Eastside Forests Scientific Society Panel, Interim Protection for Late-Successional Forests, Fisheries, and Watersheds: National Forests East of the Cascade Crest, Oregon and Washington (A Report to the Congress and the President of the United States, August, 1994).

S. Jones, "Endangered Species Act Battles," 19 Fisheries 26-29 (January 1994).

Idaho Department of Fish and Game v. National Marine Fisheries Service, Opinion on Plaintifffs' Motion for Summary Judgment and Portions of Defendants' Cross Motion (District Court for the District of Oregon, March 28, 1994).

Pacific Rivers Council et. al. v. Jack Ward Thomas, Opinion on Appeal of Denial of Injunction for Ongoing Activities on Wallowa-Whitman and Umatilla National Forests Pending Section 7 Consultation, (July 7, 1994).

Sweet Home Chapter of Communities for a Great Oregon et. al. v. Babbit, 17 F.3d 1463, 62 USLW 2587, 38 ERC 1202 (1993).

The Wilderness Society, Testimony of Dr. Mark L. Shaffer, Vice President for Resource Planning and Economics, Before the Committee on Merchant Marine and Fisheries, U.S. House of Representatives (October 13, 1993).

# RESPONSES BY JUDY GUSE-NORITAKE TO ADDITIONAL QUESTIONS FROM SENATOR KEMPTHORNE

Question 1a. As initiators of the lawsuit known as Pacific Rivers Council v. Thomas could you please tell me what you hope to gain from having consultations on forest plans if individual activities are also being consulted on?

Answer. It is important to note at the outset that the question presupposes that the Forest Service has been consulting both on individual projects and on its "chinook forest" plans in Oregon and Idaho. This is not true.

The Forest Service has not been completing consultation on individual activities on the Umatilla and Wallowa-Whitman National Forests before allowing them to go forward (see response to Question 8). Moreover, the agency steadfastly refused to submit its "chinook" forest plans for consultation even after a court ordered them to do so. Only after an injunction against ongoing activities was issued in the Oregon case did the Forest Service finally agree to submit the Umatilla and Wallowa-Whitman plans to NMFS. Even then, the agency did not submit the six "chinook" forest plans in Idaho to NMFS. That action was taken only several weeks later—after Pacific Rivers Council and other groups asked the court for an injunction against the Idaho plans.

Nonetheless, there are several important things that we and the other plaintiffs in the Pacific Rivers Council lawsuit "hope to gain" from the litigation. The first is, quite simply, for the U.S. Forest Service to obey the law. The Endangered Species Act requires the Forest Service to consult on "actions," which are defined by the Act to include ongoing activities, such as forest plans, that the agency itself believes might harm threatened or endangered species. The Forest Service has admitted in the Environmental Impact Statements accompanying the forest plans that the eight forest plans in Oregon and Idaho that contain habitat for the endangered Snake River chinook, could harm those fish and their habitat. Moreover, the agency has known for several years that it must consult on these plans, yet the Forest Service has stubbornly refused to do so.

The second thing we "hope to gain" through the litigation is protection of the endangered chinook salmon. The status of the spring, summer, and fall Snake River chinook runs was recently re-classified from threatened to endangered because the number of returning adults has fallen so precipitously: this year's runs were down more than 85 percent from the 10-year average. The economic and social impacts

of the extinction of these runs are immeasurable.

Third, our litigation is intended to ensure that the National Marine Fisheries Service has an opportunity to see the big picture by reviewing the overall forest plan. A forest plan directs on-the-ground management activities for ten to 15 years. In so doing, it "zones" the forest into management areas, establishes standards and guidelines for managing those areas, and sets resource output levels for timber, livestock, and other uses. The whole purpose of consulting on the forest plans is to ensure that the decisions and directives made in those plans are adequate to ensure both the survival and recovery of threatened or endangered species like the chinook salmon

If consultation occurs only on a site-specific, project-by-project basis, as Senator Kempthorne and others suggest, it will be impossible ever to determine whether a forest plan's decisions and directives will adequately protect the species. The National Marine Fisheries Service will have to review thousands of proposed projects on each of the eight "chinook forests" over the life of those forest plans. When consultation is solely on a project-by-project basis, the NMFS has no way of examining, for example, the cumulative impacts of a timber sale in-conjunction with all of the other timber sales, road projects, grazing allotments, and other activities that were approved previously or will be proposed subsequently. We can't think of a better way to hide the true impact of Forest Service activities than by employing that kind of "divide and conquer" strategy.

By contrast, consultation on the overall forest plan ought to provide some confidence that, subject to new information or developments, the plan's broad decisions

and directives at least will not threaten species with extinction.

Fourth, our litigation essentially calls the Forest Service's bluff on the issue of landscape- or ecosystem-level management. The agency's position in the Pacific Rivers case is completely at odds with its public pronouncements about the values of ecosystem management. It's virtually impossible to reconcile Forest Service claims that it is practicing ecosystem-level management when it is telling the courts that—especially for endangered species—it should be allowed to ignore the big picture and focus instead only on isolated, project-by-project analyses and impacts.

Fifth, the fact that we are seeking to enforce the common-sense consultation requirements for forest plans does not mean that the agency should be able to forego consultation on individual timber sales, grazing permits, and other project-level activities that might harm listed species. Not only are these also "actions" on which the Forest Service readily acknowledges that consultation is required, 1 but such project-level consultation is essential because this is the stage at which site-specific analysis of project impacts is undertaken. Where consultation on the plan examines whether the land allocations, resource output levels, and standards. and guidelines provide adequate minimums to prevent jeopardy, the project level consultation examines whether additional mitigating measures or alternatives are needed based on the site specific nature of the individual proposal.

Finally, claims that consulting on forest plans will shut down national forests across the country are simply untrue. The Court's ruling in Pacific Rivers does not require re-initiation of consultation on national forest plans every time a new species is listed as threatened or endangered. In fact, the listing of a species under the ESA rarely requires re-initiation of consultation on an *entire* forest plan. Only where the listed species is widely distributed throughout a forest and is affected by a variety of land and water disturbing activities authorized and governed by the plan is consultation on the entire plan likely to be required.

The truth is that most listed species—and the vast majority of those for which a listing decision is pending—have such a limited distribution on a national forest that consultation on the entire plan would not be required. In other cases, where species are listed because of disease, over-utilization, or other factors unrelated to decisions made by or in the forest plans, consultation on the entire plan would be pointless.

For example, the Justice Department has told us that approximately 19 of the 137 national forests are affected by the Pacific Rivers ruling. Of those, eight are the "Chinook forests" in Oregon and Idaho, and 11 are the "Mexican spotted owl forests" in the Southwest.

In addition, a review of the Category I species currently awaiting a listing decision shows just how rare re-initiation of consultation on entire forest plans will be. Approximately 90 percent of the Category I species are plants, whose habitat is sufficiently narrow that re-initiation of consultation on entire forest plans will almost never be required. And nearly half of the Category I species are in Hawaii, which has no national forests.

Moreover, when new species are proposed for listing under the ESA, there is a one-year review period during which the Forest Service could submit its plans for consultation, where required, without having to halt project level activities. Under these circumstances, it is clear that the claims that national forests will be shut down every time a new species is listed under the ESA are wildly exaggerated. So long as the Forest Service complies with its obligations in a timely way, the consultation requirement ought not be a barrier to implementation of forest plans.<sup>3</sup>

Question 1b. The Forest Service is doing a watershed analysis that evaluates all activities taking place within a watershed (grazing. mining. logging. everything). and cumulative effects are being incorporated into individual consultations. Why does that not achieve your objectives?

<sup>&</sup>lt;sup>1</sup>Although the Forest Service acknowledges that it must complete consultation before proceeding with timber sales or other project-level activities that might harm threatened or endangered species, it does not always do so. Just in the course of the *Pacific Rivers* litigation, we discovered that the Forest Service authorized at least 20 timber sales and 10 road construction projects that had not gone through the consultation process—a blatant violation of the law.

<sup>&</sup>lt;sup>2</sup> Re-initiation was required in the case of the Chinook salmon because they are widely distributed throughout the forests in question and are substantially affected by significant forest management activities, including logging, grazing, and road-building, that are determined in or by the forest plans.

<sup>&</sup>lt;sup>3</sup> Obviously, if the consultation process leads to a jeopardy opinion or to reasonable and prudent alternatives to the current forest plan, the Forest Service will have to alter its ways.

Answer. The watershed analyses that the Forest Service has committed to doing on the eight "chinook" forests do not achieve any of the objectives of our litigation in the Pacific Rivers cases. Nor do the consultations on individual projects. <sup>4</sup>

First, the watershed analyses look only at already ongoing and selected proposed activities in those watersheds. Perhaps more importantly, as described above, they do not examine the types of issues that are addressed in consultation on the forest plans.

Second, the Forest Service has been allowing projects to go forward in these watersheds *prior* to completing either the analyses or consultations with NMFS. (See response to Question 8.) Moreover, the Forest Service is far behind schedule in conducting the watershed analyses.

Third, the Forest Service does not analyze "everything" in the watershed analyses. On the contrary, the agency has routinely separated certain projects, or groups of projects, from the broader watershed analyses in order to hide their true impacts on the watershed in conjunction with other activities that are taking place. For example, in late 1993, the NMFS issued a draft "jeopardy" opinion for ongoing projects in the Panther Creek Watershed on the Salmon National Forest. The impacts of the proposed Beartrack Mine project, a cyanide heap leach gold mining operation that would be carried out in the watershed, was one of the reasons cited by the NMFS for its draft jeopardy opinion. Nonetheless, officials from the Salmon National Forest and the NMFS verbally agreed on March 7, 1994 to separate the Beartrack Mine project from other activities in the watershed. Just 3 weeks later, on March 31, 1994, the NMFS issued a "no jeopardy" biological opinion for the mine. A biological opinion for the rest of the watershed has yet to be issued.

In short, discrete, incomplete analyses of ongoing activities in a watershed is, even when coupled with consultation on individual project proposals in future years, no substitute for consultation on the overall 10-year forest plan.

Question 2. If consultation on a specific activity (like a mining project, grazing, or a timber sale) has been completed and received a nonjeopardy opinion, would you agree that that activity could go forward during the forest plan consultation? If not why not?

Answer. As described in our answers to Question 1, it makes no sense to allow dozens, hundreds, or perhaps thousands of habitat-destroying projects to go forward pending completion of consultation on the overall forest plan. Submitting such individual projects for consultation on a piecemeal basis would prevent NMFS (or FWS) from seeing the cumulative impacts of all the potentially harmful activities authorized and directed by the forest plan.

Question 3.

There is no Question 3.

Question 4. Under the PRC decision, do all "may affect" determinations have to be suspended pending consultation? What specific activities do you think have to be stopped?

Answer. We do not believe that all "may affect" activities have to be-suspended pending completion of consultation on the forest plans for the "chinook forests." It is our position that only those activities that may adversely affect Spring, Summer, or Fall Snake River chinook salmon runs should be stopped pending completion of consultation on the forest plans. Activities that have a beneficial effect on the salmon, can go forward as usual. This could include activities that promote forest health, such as watershed restoration. However, just because an activity is tagged as a forest health or watershed restoration project does not mean that it won't have an adverse effect on the salmon. Any such projects that might have an adverse effect must-be halted pending completion on the "chinook forest' plans.

As you undoubtedly know, U.S. District Judge Marsh issued a ruling on October 20, which enjoined all timber harvest and road construction and maintenance activi-

<sup>&</sup>lt;sup>4</sup>See the discussion under Question 1a. The individual project consultations do not consider prospective activities in the affected area. Thus, they cannot effectively consider cumulative impacts.

ties <sup>5</sup> that the Forest Service has concluded "may adversely affect' the Snake River chinook salmon pending completion of consultation on the Umatilla and Wallowa-Whitman National Forest Plans. He further ordered a halt to any timber removal and grazing activities that the Forest Service has deemed "likely to adversely affect" the salmon.

In his order, Judge Marsh also refused to enjoin removal of downed timber and the 1994-95 winter grazing activities on the two forests, which the Forest Service has-determined are "not likely to adversely affect" the salmon. We believe, however, that Judge Marsh erred in reasoning that those activities do not constitute an irreversible or irretrievable commitment of resources-that might foreclose reasonable and prudent alternatives. Once downed timber is removed through a process that might harm the chinook salmon, the reasonable and prudent alternative of leaving that timber in place is lost forever. Similarly, once cattle have damaged the spawning, migrating, or rearing habitat of the salmon, removing them from the allotment won't restore the habitat.

Question 5. Right now. the Forest Service makes the call on what activities fall in the "may affect" categories. In the wake of the PRC case. and if a preliminary injunction issues in Idaho. who then will make this preliminary determination?

Answer. Neither the Pacific Rivers ruling in Oregon nor any expected ruling in the Idaho case will change the process for determining which activities fall in the "may affect" category. The Forest Service will continue to make that determination.

The real issue, however, is what impact that determination has on Forest Service activities. If the Forest Service admits that particular activities might harm the chinook salmon, they should not be allowed to proceed with those projects until they have complied with the law. Expecting the government to obey the law ought not be a radical concept.

Question 6. During your oral statement to the Committee, you took issue with the argument that the wildfires in the West this summer are catastrophic and a threat to the salmon. You submitted for the record a September 19 letter signed by Yellowstone biologists asserting that forest fires are a natural process that should not be used to argue for altered timber management practices. I agree with you that fires are natural occurrences. But the Idaho fires, which are still burning today, are not natural because the present fuel loadings far exceed that levels [sic] that have occurred historically. This is well established in the science and in the Forest Service's ecosystem review. Are you suggesting that we should abandon the science and the ecosystem analysis that has been done, and that is specific to the forests in Idaho. in favor of applying an analysis completed for an entirely different ecosystem, i.e. Yellowstone?

Answer. In our oral testimony, we quoted from and submitted a letter signed by five eminent, independent scientists, to the effect that fires are not a catastrophe for streams, but can be made into a catastrophe by inappropriate salvage logging and roadbuilding. We did so because, as the letter reveals, the overwhelming weight of scientific opinion demonstrates that rivers and streams recover from the effects of fires—even catastrophic—fires. Web are aware of no studies, however, which show that rivers and streams will recover from the-effects of logging and road building in any meaningful time frame.

More specifically, your question mischaracterizes the scientists' letter. You state that we submitted "... a letter signed by Yellowstone Biologists." This is incorrect and misleading—none of the signatories are "Yellowstone biologists." The signatories are: G. Wayne Minshall, Professor of Ecology, Idaho State University; Judy L. Meyer, Professor of Ecology, University of Georgia; Jack A. Stanford, Jessie M. Bierman, Professor, Flathead Lake Biological Station, The University of Montana; James R. Karr, Director, Institute of Environmental Studies, University of Washington; Christopher A. Frissell, Research Assistant Professor, Flathead Lake Biological Station University of Montana Research Associate, Oregon State University.

<sup>&</sup>lt;sup>5</sup> Pacific Rivers Council and the other plaintiffs had never asked Judge Marsh to enjoin road maintenance activities. Thus, at our request, he subsequently removed the injunction against road maintenance projects.

You also describe the scientists' letter as "an analysis completed for an entirely different ecosystem, i.e. Yellowstone." This, too, is incorrect and misleading. The scientists' letter is not addressed at the Yellowstone ecosystem, in fact does not mention or even allude to Yellowstone. On the contrary, the letter addresses general ecological relationships between fires and streams. Those relationships apply to Idaho, to Washington, to fires and streams generally. In addition, the letter specifically addresses the issue of the cumulative effects of roads and fires, which is a very critical aspect of the Idaho fires, and less related to areas like Yellowstone that are only lightly roaded.

You underline that the Idaho fires were not natural. The scientists letter in no way states or implies that they were. The letter discusses the "natural recovery of streams" [see paragraph 3] and does not in any way discuss or allude to the natural-

ness (or not) of fires.

Finally your question asks if we are suggesting abandoning "... the science... that has been done." No. Quite the contrary, we are bringing your attention to the views of the some of the most respected independent scientists in the nation. We actively seek independent scientific input, and would respectfully request that you direct us to any peer-reviewed scientific literature that contradicts either of the letter's central points:

"... salvage logging and the accompanying roadbuilding is one of the most damaging management practices that could be proposed for the burned areas. . ." and:

". . . we know of no scientific reason to engage in salvage logging or road-building in burned areas. . . "

or any other part of the letter. In addition, we would particularly welcome any reference to peer-reviewed literature that demonstrates the benefits that salvage logging and roadbuilding have on streams or aquatic ecosystems, in Idaho or elsewhere.

Question 7. In the 1988 Foothills fire in the Boise National Forest, documented stream temperatures were so high that the bull trout were actually boiled in the stream beds and completely wiped out. Preliminary reports say this summer's fires burned as hot or hotter. Are you saying that this kind of effect on an endangered species is okay?

Answer. We recently participated in a Forest Service-sponsored field trip on the Boise National Forest to discuss the 1994 fire damage and subsequent management proposals. The following information was obtained during this trip and through fol-

low up, phone and written correspondence with Boise NF personnel.

No event that negatively impacts an endangered species like the bull trout is "okay." The key issue in this context, though, is whether there is a short-term impact on the species or a long-term impact on their habitat. Evidence from the Boise NF and from the 1988 Yellowstone National Park fires indicates that fire does not generally have catastrophic or long-term effects on fish populations. In fact, as described in more detail below, fire may actually have a beneficial effect on fish populations in many cases. By contrast, logging and road-building have been shown repeatedly to destroy their habitat.

Regrettably, there were fish kills caused by the Foothills Fire, (which actually occurred in 1992, not 1988), and by the fires this summer. However, the increased water temperature caused by the fires, which lowers the dissolved oxygen content in the stream and causes the fish to suffocate, 6 is not permanent. Stream temperatures quickly return to normal and other bull trout from above and below the fire

zone soon repopulate the affected area.

For example, according to information we received from the Boise NF, two drainages containing bull trout populations, Rattlesnake Creek and Sheep Creek, were affected by the Foothills Fire. Localized reaches of both drainages lost their resident bull trout as a result of the fire. However, within 1 year many of these reaches had been repopulated by both juvenile and adult bull trout from unaffected reaches of these drainages One fork of Sheep Creek was affected by a large landslide. This oc-

<sup>&</sup>lt;sup>6</sup> Fisheries biologists on the Boise NF pointed out that fish did not "boil" in the streams.

curred when a heavy thunderstorm fell on an area of bare soil where a particularly intense portion of the fire had removed the vegetation. <sup>7</sup> As of 1994, the fish populations in that fork of Sheep Creek had not recovered. Out of a dozen tributary streams within the two drainages however, only the fork of Sheep Creek affected by the-landslide suffered any widespread and continuing damage to fish populations.

Moreover, Boise NF biologists report that in many cases fire probably helped to improve bull trout habitat by increasing the amount of large woody debris in the stream. This debris provides shade and cover for resident trout and increases the amount of pool habitat for the rearing, of juvenile trout Large woody debris also aids' in channel stabilization and erosion control. Increased nitrogen released by the fire in low fertility headwater streams likely help aquatic invertebrate populations and by extension—resident trout populations.

"Recovery of fish populations in both systems [Rattlesnake and Sheep Creeks] is evident in 1 year and can be attributed to reinvasion by both subadult and spawning fish from refuges in adjacent reaches. The presence, quality and distribution of such refuges may be critical to the rate of recovery.'8

By contrast, the negative effects of logging, logging roads and grazing on watersheds are all too common and well documented—and they are much longer-lasting. Such impacts have been found on the Boise NF in the same drainages burned by the Foothills Fire.

"Rattlesnake Creek had lower [rainbow and bull trout] densities overall and is also believed to have lower quality habitat as a result of intensive roading in portions of the drainage. "9

In sum, there does not appear to be much evidence to justify fuel reduction activities, such as thinning or salvage logging, for the benefit of bull trout. On the contrary the evidence suggests the need to maintain a large quantity of widely distributed, high quality habitat in order to ensure that fish populations can recover from natural or manmade disasters.

Question 8. During this-hearing you have made allegations that the Forest Service was in flagrant violation of the Endangered Species Act by carrying out 20 timber harvests and 10 road projects without consultation with NMFS, as required by law. The allegation comes as quite a surprise will you please provide the Committee with thorough documentation for these serious allegations?

Answer. Our statements at the hearing about the Forest Service proceeding with "may affect" timber sales and road construction projects were not allegations. They were facts.

As the attached documents show, the Forest Service admitted in open court that it's policy was to proceed with these and other sales even before consultation was completed: "[T]he Forest Service position [is] that on-going activities with a determination of "NLAA" [not likely to adversely affect] may continue while consultation is in progress.... 10

This is a clear and blatant violation of the public trust, let alone the Endangered Species Act.

<sup>&</sup>lt;sup>7</sup>This landslide was similar to many that have occurred on the Boise and other national forests in Idaho after logging operations.

<sup>8</sup> Id.

<sup>9</sup> Reiman, B. Notes on the Progress on Foothills Fire Fish Monitoring (1994).

<sup>10</sup> Second Declaration of Rick Roberts, ESA Coordinator for USFS Region 6, at paragraph 17, July 23, 1993. A determination of "not likely to adversely affect" is one of the categories of "may affect" determinations that requires consultation under the ESA. As both the Pacific Rivers and prior court rulings have shown, the Forest Service cannot arbitrarily decide to proceed with such "may affect" projects before the ESA consultation process is completed.

<sup>[</sup>NOTE: Court documents referred to in this response are held in committee files.]

Moreover, the agency also admitted in court documents that it had completed the 20 timber sales and 10 road construction projects that we referred to at the Senate hearing. <sup>11</sup> That fact was highlighted by the Ninth Circuit in it's July 7,1994 ruling:

After PRC submitted a list of the activities it sought to enjoin, the Forest Service admitted that it had already completed 20 of the Identified timber sales and ten of the identified road projects. These projects were undertaken without consultation with the NMFS. 12

Though we have not had an opportunity to compare the lists of "may affect" sales with project completions on the Umatilla and Wallowa-Whitman forests since the July, 1993 declarations, we suspect that additional projects have gone forward without completing consultation. On the six Idaho forests, the agency's refusal to provide us with project-specific information makes such an investigation impossible, though we have no reason to believe that the Forest Service has stopped all activities on those forests that may adversely affect the salmon pending completion of consultation.

# STATEMENT OF JIM LITTLE, THE NATIONAL CATTLEMEN'S ASSOCIATION

Good morning Mister Chairman and Members of the Committee. My name is Jim Little. I am a third generation cattle rancher from Emmett, ID, where grazing cattle on public land is an essential part of our business. I thank you for the opportunity to address reauthorization of the Endangered Species Act (ESA) on behalf of the National Cattlemen's Association (NCA) which represents 230,000 cattle producers nationwide. I am Vice-Chairman of the Private Lands and Environmental Management Committee for the NCA and Chairman of the Endangered Species & Wildlife Subcommittee. I am also a past president of the Idaho Cattle Association and served on the National Public Lands Advisory Council.

I am also here to speak for the NCA as a member of the Endangered Species Coordinating Council. This is a coalition of more than 200 companies, organizations and property owners which use or rely upon natural resources and who are united in their belief that the national interest is served by policies that protect both precious wildlife and jobs and the economy. The coalition includes miners, timberland owners, farmers, ranchers, manufacturers and fisheries industries as well as organized labor.

More than 20 years after its enactment, the U.S. Congress must now address the reauthorization of the ESA. The National Cattlemen's Association strongly urges a comprehensive review of the increasingly troubled provisions of this law. The ESA was first written and enacted with the noble and justifiable objective—and one embraced in NCA policy—of saving species from extinction. Yet, after more than 20 years, the ESA has failed to achieve this objective. The application of the ESA has increasingly resulted in severe, widespread damage to property rights, jobs, entire regional economies, and basic human needs. Clearly, the law is troubled and must be reformed.

The cattle business is particularly impacted by the ESA. Cattlemen graze livestock on over half of the surface of the U.S. These pastures and rangelands are, relatively, some of the least manipulated, least touched by the hand of man, of all the lands in this country. As such, these lands provide habitat for many of the species now listed as threatened or endangered. Cattlemen should be endangered species' best friends, and we certainly would like to be. However, the current law and its implementation by U.S. Fish & Wildlife Service (USFWS) provide nothing but disincentives to those with the greatest opportunity for protecting the species.

As a consequence of this law, ranchers and farmers are simply scared to even acknowledge that they have endangered species on their property. They are apprehensive, and justifiably so, about the severe penalties, lawsuits, land use restrictions and loss in property values that this law effectuates. This legal situation makes it

<sup>&</sup>lt;sup>11</sup>See Third Declaration of Rick Roberts, ESA Coordinator for Region 6, at paragraphs 2,3,6, and 8, July 30, 1993.

<sup>12</sup> Pacific Rivers Council v. Thomas, 30 F.3d 1050, 1053, note 6 (9th Cir. 1994) (emphasis added)

a curse to be host to listed species on ranches. The good stewardship which has fostered the protection of endangered species becomes a liability for the landowner, rather than the asset which stewardship has represented for generations. The ESA confers more authority to restrict human activities than any other federal environmental law. It has been used by those opposed to economic activities, often for reasons unrelated to species conservation, to challenge such activities. The ESA has become the statute of choice for mounting administrative and judicial attacks on legitimate economic enterprise.

At the heart of almost all problems with the ESA is the absolute inflexibility of its requirements and punitive prohibitions. The inflexibility has been demonstrated in many provisions of the law: from the listing and delisting criteria to recovery plans, from Section 7 consultation to the take prohibitions, and from habitat con-

servation plans to critical habitat designations.

We have gained experience in the past 20 years. Congress now has the opportunity to learn from the mistakes that have been made. The ESA can be a law that truly accomplishes its goals and objectives to protect and conserve threatened and endangered species, but not without reform. A close examination of the current law and the record of recovery to date reinforces the need for reform . The remainder of my comments will focus on areas that can and should be changed to make this law work more successfully.

# The Listing and Critical Habitat Designation Processes

The scientific integrity of the listing process and the designation of critical habitat must be ensured by:

 Placing responsibility on listing agencies to identify and collect the best scientific data to support listing and critical habitat designations.

· Requiring that data be field-tested, where feasible.

 Requiring more detailed findings for listings (biological reasons for listing, adequacy of state and local efforts, etc.)

· Requiring scientific peer review of proposed listings and critical habitat des-

ignation decisions by outside review panels.

· Ensuring that the definition and listing of species are based on modern scientific procedures.

 Limiting listings to the more reliable and objective biological unit of species, thereby focusing resources and reducing the opportunity for abuse.

 Ensuring that habitat designated as critical habitat is truly critical by designating only areas actually occupied by the species and requiring areas to be excluded from critical habitat if the costs of inclusion outweigh the benefits.

• Limiting emergency listings (which exclude public comment and are exempted from the Administrative Procedures Act) to situations where the species is threatened by immediate extinction.

# The Recovery Planning Process

The recovery planning process must be strengthened by establishing it is as the focus for formulating management policies and guidance to implement the ESA. This can be done by:

 Avoiding conflict of interest situations by prohibiting a petitioner from benefiting as a member of a recovery plan team.

· Requiring publication of the draft recovery plan at the time the species is listed and the final recovery plan 1 year from the date of listing.

- · Requiring that the recovery plans include biological and economic assessments.
- Requiring that recovery plans consider more fully socioeconomic impacts (e.g., assessment of direct and indirect economic costs to both public and private sectors, identification of impacts on employment and on the use of private property.)
- Requiring that recovery plans identify state and local efforts to protect the species and any conflicts with those efforts. Requiring that recovery plans assess fully the likelihood of recovery of the species.

• Requiring that each recovery plan consider four alternatives: no action, maintenance, least socioeconomic impact, and maximum recovery. Each alternative should include an assessment of both the risks posed to the species by the alternative and the direct and indirect costs to the public and private sectors that would result from the alternative.

# The Consultation and Habitat Conservation Plan Processes

The ESA should allow private landowners and other non-federal parties to apply for exemptions in the same manner now available only to Federal agencies. That is, the ESA provides a 90-day consultation process for Federal agencies to analyze the effects of a proposed action on a listed species as a whole. For private landowners, the ESA establishes a permit process which requires the landowners to prepare a habitat conservation plan which focuses on mitigation and enhancement of habitat for individual members of a species. The habitat conservation plan process is more expensive and lengthier, and has a more stringent standard than the consultation process for Federal agencies. Many landowners simply cannot afford to pursue a habitat conservation plan.

# The "Take" Standard

The "take" standard must be clarified to provide meaningful guidance to private landowners. The current imprecise take standards of harm and harass should be defined to ensure that private landowners are subject to criminal and civil sanctions only when their actions cause physical injury to species members. Additionally, the ESA must clarify that compliance with a recovery plan or a cooperative management agreement qualifies as a lawful activity.

# Property Rights

Finally, and most importantly, the ESA must recognize impacts on private property rights and provide for compensation in cases where significant property rights are lost. The presence of a listed species usually results in restrictions on land use. Federal actions are prohibited if they could conceivably result in harm to the species and individuals are prohibited from activities that result in harm to the species. These two factors produce the same result as direct regulatory restriction.

Landowners have been prohibited from cutting trees, clearing brush, planting crops, building homes, grazing livestock and protecting livestock from predators, essentially depriving them of the only economic uses they can make of their property. In turn, they are less productive and contribute less to local, regional, and national economies. Despite provisions in the ESA (Section 5) to allow the government to acquire lands and prevent habitat loss on private lands, the government has shown no inclination to compensate citizens for the unconstitutional takings of their property. The ESA must be reformed to establish administrative procedures for private parties to obtain compensation when they are deprived of economically viable use of their property.

#### Summary

The Endangered Species Act is broken. It is failing to aid truly endangered and threatened species. It imposes a heavy burden on a few individuals for the putative benefit of all. Those few must bear the burden without the compensation guaranteed by the Fifth Amendment to the U. S. Constitution. An almost complete lack of incentives to land owners and the command and control policies of the ESA has produced a level of frustration among those with the greatest opportunity to protect species such that few are inclined to acknowledge the presence of a listed species on their property. As a result, it is the species that pays the cost. It must be admitted now, before more species become the victims of this noble but broken law, that the government cannot adequately protect species until it allows (not forces) landowners to be come willing partners in the preservation of threatened and endangered species.

Once again, I want to thank you for the opportunity to provide the National Cattlemen's Association's views on the reform of the Endangered Species Act, and

strongly urge immediate reform of this Act. I would be pleased to answer any questions you may have.

# STATEMENT OF JEFFREY T. OLSON, DIRECTOR, ARNOLD BOLLE CENTER FOR ECOSYSTEM MANAGEMENT, THE WILDERNESS SOCIETY

Mr. Chairman and members of the committee, I am Jeffrey T. Olson, Director of The Arnold Bolle Center for Ecosystem Management at The Wilderness Society. The Society is dedicated to the sound management of the nation's public lands, a system

of publicly owned land that is unique in the world.

I am pleased to have this opportunity to testify today about endangered species, and the role of federal land management policies in contributing to species endangerment. It is disturbing, Mr. Chairman, to realize that of all the species included on the list, more than two-thirds are there because of federal policies that promote resource extraction, rather than resource stewardship of the public trust. The net result is that you and I and all other taxpayers of this country are effectively paying for these policies twice—first to subsidize federal land use activities such as logging, mineral extraction, and grazing, and then to repair the damaged habitats left behind, and to recover species whose viability is threatened by habitat loss. Even if the federal government were running a budget surplus, this would make no sense. Given our \$4 trillion national debt, it is insane.

# The Role of Federal Lands in Species Endangerment

In 1993, The Wilderness Society and the Environmental Defense Fund published a report entitled The Taxpayers' Double Burden, which I submit today for the record. The principal author, Elizabeth Losos, reviewed the causes for endangerment as determined by the U.S. Fish and Wildlife Service for each of the 777 federally listed threatened and endangered species. The following summarizes our findings:

 Between 62 and 68 percent of all species listed as threatened or endangered species under the Endangered Species Act are at risk in part from hardrock

mining, logging, livestock grazing, water development and recreation.

• Extractive uses—livestock grazing, logging, and hardrock mining—are caus-

al factors in 45 percent of all listed species.

• Water development projects—such as dams, flood control, water diversion, and dredging—have the greatest impact, accounting for nearly one-third of all listed species.

· Recreational activities-primarily off-road vehicle use and general recre-

ation—are contributing factors for 23 to 26 percent of species listings.

• Endangerment from resource extraction is higher among species that occur on federal lands than among those whose ranges do not include federal lands. Many of those species occur no where else, other than the federal lands. For many more, the federal lands include the majority of remaining preferred habitats.

The bottom line is that the federal government, as the steward of more than onethird of the nations's total land base, is the primary steward of biological diversity. Caution and care should be the watch word in its management.

#### Costs of Subsidies

Natural resource subsidies consist of two types: (1) resources sold for prices that fail to capture the full cost of offering them for sale, even though they may be sold competitively and (2) resources for which the federal government intentionally sells the resource or service for prices that are less than their fair market value. Timber sold below cost is an example of the first. Mineral rights and mineral lands patents under the Mining Law of 1872 are an example of the second. Taken together, these subsidies represent a substantial expense for taxpayers of more than \$1 billion a year for grazing and below-cost timber sales alone. In 1992, the GAO found that some \$1.2 billion worth of minerals were extracted from federal lands with no compensation to the federal government. The same GAO study found that irrigation subsidies in the western states cost taxpayers some \$534 million to \$2.2 billion.

Taken together, the congressional Budget Office estimates that adjusting fee structures to ensure a better return from natural resource extraction on federal lands

could produce an additional \$4.5 billion.

On top of these subsidy costs are the significant costs associated with species listing and recovery. In just 1 year, for example, the federal government spent more than \$112 million to save listed species. State governments spent another \$64 million. Out of the total \$176 million dollars spent in that 1 year, \$118 million was spent on species that are endangered in whole or in part by grazing, logging, mining, water development, or recreation. To attain full recovery, the Department of Interior estimates that each listed species would require expenditures of \$100,000 to \$200,000 per year over the course of the next 10 years. Federal agencies currently spend less than \$10,000 per year for each species on the list.

In addition, there are the costs in human terms, people whose jobs are affected and communities whose economies are threatened. Much of the debate has centered on issues of jobs, but rarely has the full story been explored. In a recent article, M.I.T. economist Stephen Meyer, found that those states with the most listed species also enjoyed the strongest economies. This is not to suggest endangered species listings are an economic development strategy. Rather, the link is that the fastest growing economies are destroying habitats at the greatest rates while the effects of listing are neither of sufficient size or duration to harm economic performance at either the state or national level.

In the Pacific Northwest, for example, loss of northern spotted owl habitat to logging has been a concern since the late 1970s. As private old-growth forests were liquidated, spotted owl habitat became increasingly concentrated on federal land, and more and more fragmented. Continuing to cut federal timber at rates that exceeded 6 billion board feet per year has had the predictable result of bringing about the listing of the species as threatened. By changing timber cut levels and policies in the 1970s, when the problem became apparent, the Forest Service and BLM could have avoided the need for the emergency efforts that are now underway in the Northwest.

Another casualty of failed Federal policies in the Northwest is the Pacific salmon population. Dams, overgrazing, excess logging, overfishing, and other factors have decimated salmon stocks throughout the region. According to the American Fisheries Society, more than 200 of the region's salmon stocks are at risk of extinction or are of special concern.

Salmon are a central part of Northwestern culture and are especially important to Native peoples. The fish's economic importance is tremendous, too. Salmon population declines have wiped out jobs and income, and the losses continue to escalate.

Just how valuable salmon are to the region's economy was demonstrated by a Wilderness Society analysis a year ago. Wild salmon are, in essence, natural capital. Far more genetically diverse than hatchery salmon, they are the gene pool for all of the region's salmon. Focusing on wild coho and chinook populations, resource economist Carolyn Alkire calculated that if populations of just these two species recovered gradually, then their value in the 12 rivers studied could appreciate by \$318 million over the next century. On the other hand, continued population declines will result in "depreciation" of this natural asset of \$137 million—or 32 percent.

We cannot afford, ecologically or economically, to continue policies that depress salmon stocks. It is short-sighted; it is folly. Just ask all those who earn a living from salmon, especially residents of small coastal villages.

The problem of species endangerment results from many factors, but almost all boil down to habitat loss caused by human development activities. Where federal land is involved, which is the case for more than two-thirds of currently listed species, the federal government can go a long way toward preventing species endangerment by correcting policies that focus on resource extraction at the expense of stewardship. To correct this imbalance in federal policies, The Wilderness Society recommends the following steps:

 Identify lands that cannot sustain activities such as logging, grazing, water development, and developed recreation, and protect them from such uses. • Impose fees for resource extraction and recreation that are comparable to those realized by nonfederal providers, and set the minimum acceptable price for those resources at no less than the cost of offering those resources for sale.

• Impose an annual impact fee based on a percent of gross profits for resource extraction activities on federal land that imperil species or ecosystems. The size of the fee should vary with the severity of the threat to biological diver-

sity and the cost of mitigation.

Mr. Chairman, much of the current debate over the Endangered Species Act centers on the impact of the Act on private property rights. But, Dr. Losos' report demonstrates that about 50 percent of the endangered species problem results from misuse of public lands. By simply eliminating perverse federal resource incentives that result in species endangerment, Congress can go a long way toward solving the endangered species problem without setting foot on private land. To make a good deal even better, the cost of such reforms would actually be a reduction in taxpayer expenditures. There are few occasions in life where we can have our cake and eat it too. This is one of them. We urge Congress to act.

AMERICAN
FOREST &
PAPER
ASSOCIATION

1111 19TH STREET NW. SUITE 800, WASHINGTON, DC 20036 PHONE (202) 463–2700 DEPARTMENT FAX (202) 463–2708

FOREST RESOURCES GROUP
October 21, 1994

The Honorable Bob Graham Chairman Subcommittee on Clean Water, Fisheries and Wildlife Senate Committee on Environment and Public Works Washington, D.C. 20510

#### Dear Chairman Graham:

On behalf of the American Forest & Paper Association (AF&PA), I would like to thank you for the opportunity to submit comments for the record on the interaction of the Endangered Species Act of 1973 (ESA) with the management of federal land and resources. We will address one particular issue which is not currently considered in any pending legislation -- the effect on existing federal land management plans when a new species is listed under the ESA. We also endorse the comments submitted by the Endangered Species Coordinating Council.

AF&PA is the national trade association of the forest, pulp, paper, paperboard, and wood products industry. AF&PA represents approximately 425 member companies and related trade associations (whose memberships are in the thousands) which grow, harvest and process wood and wood fiber; manufacture pulp, paper and paperboard products from both virgin and recovered fiber; and produce solid wood products. As a single national trade association, AF&PA represents a vital national industry which accounts for over 7 percent of the United States manufacturing output. AF&PA has many members who are wholly or partially dependant on timber from the national forests and other federal lands.

In April 1992, the National Marine Fisheries Service (NMFS) declared that the spring/summer and fall runs of Snake River Chinook Salmon were threatened species under the Endangered Species Act (ESA). In December 1993, NMFS designated critical habitat for the two salmon stocks. (In August 1994, NMFS issued an emergency rule designating both salmon stocks as endangered.) The Snake River and its tributaries with salmon habitat course through the Wallowa-Whitman and Umatilla National Forests in Oregon and several national forests in Idaho.

Section 7 of the ESA requires any federal agency to ensure that its actions are not likely to jeopardize the continued existence of a listed species or adversely modify or destroy its designated critical habitat. When an action may affect a species, the agency must consult with the NMFS (for marine species such as salmon). Unless the action is not likely to adversely affect the species, NMFS must prepare a biological

opinion in which it advises the agency whether the proposed action would violate the section 7 standard. If NMFS concludes that jeopardy would be likely, it must describe any reasonable and prudent alternatives that would meet the section 7 standard.

Section 6 of the National Forest Management Act (NFMA) requires the Forest Service to develop a "land and resource management plan" for each unit of the National Forest System. NFMA requires the plans to be revised at least every fifteen years while the Forest Service's planning regulations establish ten-year planning cycles (36 C.F.R. 219.10(g)). NFMA section 6 directs the Forest Service to "use a systematic approach to achieve integrated consideration of physical, biological, economic, and other sciences." Section 6 further mandates that plans provide for multiple use and sustained yield and "in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness." The Forest Service adopted plans under NFMA section 6 in 1990 for the Wallowa-Whitman and Ilmatilla National Forests.

In anticipation of the salmon listings, NMFS and the Forest Service developed an agreement to achieve compliance with ESA section 7 and fulfill the Forest Service's responsibilities under NFMA section 6:

- Rather than reinitiate consultation on the forest plans, the agencies determined that the most efficient use of their resources for protection of the salmon would be to develop conservation strategies for watersheds that would avoid jeopardizing the salmon;
- Forest plans that were inconsistent with these strategies would then be amended or revised;
- New projects such as timber sales would only be allowed after the agencies adopted a strategy for the particular watershed;
- The agencies agreed to review some 3500 ongoing projects on the Wallowa-Whitman and Umatilla National Forests as well as ongoing projects on other affected national forests.

Several activist groups sued the two agencies in the Federal court in Oregon and demanded that they suspend all ongoing and future activity on the two forests until they completed consultation on the two forest plans. Pacific Rivers Council v. Thomas. In July of this year, the U.S. Court of Appeals for the Ninth Circuit ruled in effect that nothing could occur on these national forests that might affect the salmon, no matter how much the agencies analyze the particular watershed or project, until the agencies complete consultation on the plans. The Ninth Circuit based this ruling on its conclusion that the ESA must be interpreted as broadly as possible, not because the agencies were failing to protect the salmon. The court paid absolutely no attention to the efforts of the two agencies delegated responsibility by Congress for carrying out the complex procedures of these two statutes.

Shortly after the Ninth Circuit's decision, the Forest Service suspended activity on all existing timber contracts, grazing permits, and road projects in the two national forests. Forest products companies and their employees were ordered to cease all operations and leave the forests. Ranchers were ordered to remove all cattle from forest rangelands. Road crews were ordered to leave their construction sites in an environmentally sound condition except maintenance projects which had been found "not likely to adversely affect" the salmon. The Forest Service also announced it would not hold any timber sales, award any timber contracts or grazing permits, or start any road construction.

A companion case has been filed in Idaho federal court demanding the Forest Service cease ongoing and future activity on six national forests in Idaho until the agencies complete consultation on the forest plans. Pacific Rivers Council v. Thomas. In August, several activists filed a copy-cat lawsuit in Arizona federal court demanding that the Forest Service consult with the Fish and Wildlife Service (FWS) on the effect on the Mexican Spotted Owl of the forest plans for the national forests in Arizona and New Mexico. Silver v. Thomas. The plaintiffs further demand that the Forest Service cease all ongoing and future activity until completion of the consultation. The plaintiffs also demand that the Bureau of Indian Affairs take similar action with respect to the Navajo Nation Forest Management Plan. FWS listed the Mexican Spotted Owl as a threatened species under the ESA in March 1993.

Congress should overturn the unnecessary ruling by the Ninth Circuit in favor of the reasoned approach of the agencies to which Congress has delegated authority under the ESA and NFMA. The Subcommittee should prepare an amendment to both statutes which recognizes that the listing of a species, or other action such as designation of critical habitat, may require new consultation on an existing forest plan. However, the amendment would allow the Forest Service to continue its multiple use management of the national forests while conducting the plan-level consultation provided it complies with the consultation procedures of the ESA for any action which it proposes to take or has taken under the plan. AF&PA is prepared to assist the Subcommittee draft appropriate language to accomplish this.

We thank the Subcommittee for the opportunity to submit these comments for the record and look forward to working with the Subcommittee on the ESA issues affecting federal lands as well as the other changes necessary to bring a workable ESA into reality.

Sincerely,

Doug Crandall
Assistant Vice President -

Public Forestry

Endangered Species Coordinating Council

October 21, 1994

The Honorable Bob Graham
Chairman
Subcommittee on Clean Water, Fisheries and Wildlife
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Chairman Graham:

On behalf of the Endangered Species Coordinating Council ("ESCC"), I would like to thank you for holding a series of hearings on the Endangered Species Act of 1973 ("ESA") and various issues that arise under this most important and intractable environmental law. At your September 29 hearing, witnesses have described for the Subcommittee the interaction of the ESA with, and its effect on, Federal land management and those who rely on Federal land resources.

We are providing the Subcommittee for inclusion in the record our views on the effect of ESA section 7 on management of Federal land. We have also included comments on the difference in treatment between public lands and private lands. S. 1521, the "Endangered Species Act Procedural Reform Amendments of 1993" introduced by Senator Shelby addresses many of the issues we raise below.

The ESCC is a coalition of more than 240 companies, associations, individuals and labor unions involved in ranching, mining, forestry, manufacturing, fishing and agriculture. A current list of ESCC members is enclosed. We seek to provide workable procedures and positive incentives in the ESA which promote conservation of wildlife in a way that considers economic factors and respects the rights of private property owners without impairing its fundamental commitment to protect listed species. The ESCC has endorsed S. 1521 as legislation which will achieve these goals but also recognizes that S. 921 addresses some of these issues as well.

P.O. Box 33273

Washington, D.C. 20033-0273

Phone: (202) 463-2746

The ESA addresses proposed Federal actions, including Federal land management actions, in section 7. Subsection 7(a) requires that Federal agencies, in consultation with the Secretary of the Interior: (1) utilize their authority to carry out the purposes of the ESA for the conservation of listed species; and (2) ensure that all proposed agency actions are not likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat of a listed species. Any proposed Federal agency action which may affect a listed species or designated critical habitat must undergo biological review by the Secretary in the "consultation" process which is set out in subsection 7(b). If the action is likely to "jeopardize" the continued existence of the species or destroy critical habitat, the Service must recommend reasonable and prudent alternatives to the proposed action. The consultation should be completed within 90 days.

Our first concern applies to consultations generally. The two-part statutory standard by which Federal agency actions are measured during a consultation are confusing. There should be one criterion in the statute -- jeopardy -- by which all effects on a species and its critical habitat from a proposed Federal action are measured. As we understand the Secretary's regulations, even he has equated destruction or adverse modification of critical habitat with jeopardy to the species (50 C.F.R. 402.02). Congress should do the same.

Turning to Federal lands, Congress must address the interaction of the ESA, the National Forest Management Act ("NFMA") and the Federal Land Management and Policy Act ("FLPMA"), as well as the National Environmental Policy Act ("NEPA"). The combined effect of these four statutes has been a cascading series of conflicts and court injunctions, even when the agencies attempt to coordinate their actions. In particular, the two planning statutes take a long-term view of multiple-use land management activities, whereas the ESA focuses on specific species and individual management activities.

The ESA provides no particular role for Federal lands, although the Secretary focuses considerable emphasis on Federal lands for recovery of a number of listed species. For units of the National Park System or the National Wildlife Refuge System, this emphasis may be compatible with the single-use purpose of these lands. However, when the Secretary seeks to set aside large areas of the FLPMA public lands or the National Forest System for a single species, a conflict arises with the multiple use purpose of these lands. This conflict is particularly evident when the Forest Service or the Bureau of Land Management, under the guise of endangered species recovery, changes management of the lands entrusted to their authority from multiple use on which recreationists, communities and businesses rely to a single use devoted to the perceived needs of a particular species. Often, this change occurs without consideration of the length of time it will take to actually implement the conservation objective or of the social and economic costs resulting from an immediate set aside as compared with a gradual process.

Congress has usually reserved to itself the authority to set aside multiple use land for a single use, such as designating wilderness areas. Now, however, the

agencies are effectuating single-use management under NFMA and FLPMA land use plans and even by means of terms and conditions on incidental take statements.

A second conflict between the Federal land management laws and the ESA is the process for consultation when new species are listed. As you are aware, both agencies have in place land use plans for management of specific units under the agency's jurisdiction over a ten to fifteen year period. When the Snake River salmon runs were listed under the ESA, the Forest Service and the National Marine Fisheries Service determined that the existing forest plans in the affected area should be reviewed, and amended if necessary, over a period of time. The agencies then agreed that all ongoing and future projects should be reviewed for their impact on the salmon and, if necessary, undergo formal consultation while the underlying plans were being analyzed.

The U.S. Court of Appeals for the Ninth Circuit has now rejected this good faith, reasonable effort by the federal agencies, ignoring the fact that Congress delegated to these agencies the authority to implement the applicable laws for protection of a listed species and to manage not just forest lands but also existing timber contracts and grazing permits within those forests. This holding came in the case of <a href="Pacific Rivers Council">Pacific Rivers Council v. Thomas</a> decided on July 7, 1994. The Subcommittee should realize that this requirement to stop everything whenever a new species is listed will apply throughout the national forests in Montana, Idaho, California, Washington, Oregon, Arizona and Alaska as well as public lands in those states. Already, copy-cat lawsuits are pending in Idaho and Arizona.

Merely amending the ESA may not solve these problems. The land management laws themselves should also be amended to provide a coordinated approach to species consultation that recognizes both the role of land use planning and subsequent plan implementation actions.

The ESA also recognizes a role for a "permit or license applicant." Section 7 provides that the 90-day consultation period may not be extended without the applicant's consent and the Secretary's regulations allow the applicant to submit comments on the draft biological opinion. Unfortunately, the ESA does not define "permit or license applicant" for purposes of consultation. In section 3(12), the ESA defines this term for purposes of the exemption process following consultation (discussed below) but not for actual consultation. The Secretary has a regulation (50 C.F.R. 402.02) which defines "applicant" broadly as anyone requiring "formal approval or authorization" from a Federal agency.

In operation neither the Service nor the land managing agencies always protect or consider the rights of applicants. For example, many forest products companies bid on national forest timber to meet their timber volume requirements to stay in business. Once the Forest Service offers the sale and opens the bids, the company with the high bid usually relies on that timber for its mill. At that point, the high bidder, and of course the contract holder if the sale is awarded, should be considered an applicant. Currently, the Forest Service does not consider the high bidder to be an applicant but

the Bureau of Land Management does. The federal courts have also questioned the status of a high bidder and whether a timber sale is within the meaning of a "permit or license." <u>Lone Rock Timber Co. v. Babbitt</u>, 842 F.Supp. 433, 439 (D.Or. 1993). As this case also shows, even when applicants are recognized, consultations are often extended without the consent of the applicant.

Congress should clearly set out the rights of applicants in a manner that directs the Secretary to work with the applicants rather than ignore them. Congress should also define applicants so all persons relying on Federal authorization qualify, including high bidders and contract holders. Obviously, if the Federal agency can interrupt the contract to engage in consultation on a newly listed species, the "contract" holder is still in the category of an applicant for Federal authorization.

The last phase of section 7 consultation occurs if the Secretary concludes that no jeopardy will result from the proposed action or from a reasonable and prudent alternative. The ESA then directs the Secretary to issue an incidental take statement which protects the agency and any applicant from prosecution for a violation of the take prohibition in ESA section 9. The Secretary sometimes has difficulty differentiating between "jeopardy" and "take." In some biological opinions, it seems as though the effect on one or two members of a species results in a jeopardy finding to the species as a whole. In others, the proposed action is cleared but then the incidental take statement is conditioned in a manner that makes it in effect an alternative to the proposed action in order to protect the species as a whole. Congress should clearly specify the differences between these two concepts.

The final element of section 7 is the exemption process. On its face, the exemption process establishes a Cabinet-level Endangered Species Committee to review proposed Federal projects which have received a jeopardy opinion. The review must be requested by the Federal agency, the Governor of the affected state or by the applicant, if any. The unwieldy nature of this process in the face of heated controversy was amply demonstrated by the effort of the Bureau of Land Management to obtain an exemption for 44 timber sales in 1991. While this process provides a final hope for project proponents, and may actually work as intended some day, it should not be considered an integral part of the ESA/Federal land equation.

One interesting aspect of the treatment of Federal lands in particular, and Federal actions generally, is the contrast with the treatment of private activity. Contrary to the intent of Congress as exhibited in the legislative history of the ESA, the statute imposes far more stringent substantive and procedural constraints on private landowners than on Federal agencies. We have enclosed a chart displaying these inequities.

First, as previously noted, federal agencies are deemed to comply with the ESA if they are found to not likely jeopardize the continued existence of an entire listed species or adversely affect critical habitat designated by rule (ESA § 7(a)(2)). On the other hand, private landowners' projects are barred if they are deemed to "take" even

one member of the species (ESA § 9(a)(1)), which the Secretary has attempted to extend to include "significant habitat modification" (50 C.F.R. 17.3).

A perfect example of the difference in treatment is the lawsuit filed by the government against the Anderson & Middleton Logging Company in the U.S. District Court for the Western District of Washington. The government alleges that Anderson & Middleton will "take" an owl pair if it harvests 70 acres of timber within 2.5 miles of a an owl nest site. However, the Fish and Wildlife Service has provided the Bureau of Indian Affairs with an incidental take statement for harvesting a similar amount of timber within 2.5 miles of the same nest site.

Second, a federal agency can gain immunity from prosecution for an illegal "take" of a species by obtaining an incidental take statement through the 90-day consultation process. If the agency action passes consultation, the agency obtains the incidental take statement without undergoing additional procedures, incurring additional costs, or expending additional time (ESA § 7(b)(4)). Furthermore, the entire consultation process is closed to the public. Finally, if the consultation fails, the agency can seek an exemption for its project by applying for review by the Endangered Species Committee (ESA §§ 7(e)-(m)). On the other hand, if the private landowner wishes to obtain the same assurance that he is in compliance with the Act by applying for an incidental take permit, he must open his business to full public exposure, commit to a multi-year process, and be prepared to make heavy expenditures both before and after the immunity is granted (ESA § 10(a)(2), (c)).

By preparing an habitat conservation plan (HCP) and applying for an incidental take permit, the private landowner submits to government permitting and monitoring of his private activities, the airing of his business plans in public hearings, and, in many cases, the imposition of a steering committee of public officials and environmental leaders to redesign those plans. He is compelled to prepare an environmental impact statement or assessment — an unprecedented and unacceptable extension of the federal NEPA requirements to otherwise lawful private activities. If he decides to jointly prepare an HCP with other landowners, he risks prosecution under the antitrust laws since the ESA does not, and the Fish and Wildlife Service cannot, exempt him from those laws. The cost of preparing HCPs is exorbitant in money and time, reaching into millions of dollars and consuming several years. The costs actually multiply after the HCP is completed, with most holders of incidental take permits being required to fund basic research on the affected species, dedicate much of their land to the species, and acquire additional land to add to the species' habitat.

Finally, if the landowner commits to the process, exposes his business to the public, expends the funds, and consumes the time, and then is denied a permit, he, <u>unlike</u> the federal agencies, has no recourse other than to sue for an unconstitutional taking of his property. Only federal projects may be granted an exemption by the Endangered Species Committee under ESA § 7(g)(1).

In its zeal to obtain HCPs, the Service has refrained from informing potential applicants of the hurdles they face. Indeed, to our knowledge the Service still has not

warned large private timberland owners whom it is urging to engage in the preparation of cooperative HCPs and who happen to have significant shares of a number of domestic and export markets, of the antitrust risks they would run as they mutually plan and schedule their harvesting under the agency's auspices.

We appreciate the opportunity to submit our comments for record and look forward to working with the Subcommittee to establishing a workable ESA.

Sincerely,

William R. Murray Executive Director

#### Enclosures

cc: Members of the Subcommittee on Clean Water, Fisheries and Wildlife

# INEQUITIES IN PROCEDURES AND STANDARDS FOR ENSURING COMPLIANCE OF FEDERAL AND NONFEDERAL PROJECTS WITH THE ENDANGERED SPECIES ACT

FEDERAL PROJECTS
Consultation Under ESA § 7
(Incidental Take Statement)

PRIVATE, STATE & LOCAL PROJECTS
Conservation Plans Under ESA § 10
(Incidental Take Permit)

#### **STANDARDS**

- Not Likely To Jeopardize The Continued Existence Of The Entire Species
- Not Adversely Modify <u>Critical Habitat</u> Designated <u>By Rule</u>

- Not Harm Or Harass A <u>Single Member</u> Of The Species
- Not Adversely Modify
   Any Habitat
   Identified Without A Rule

# **DURATION**

FWS Must Decide
 In 90 Days

 No Time Limit For FWS To Decide --Typically, 1-5 Years

# COST

<u>Little Cost</u> Beyond
 Normal Expenses
 Required By NEPA And
 Other Env'l Laws

 Steep Costs, Typically in \$100,000's, To Both Prepare And Implement The Conservation Plans

# FREQUENCY

Compliance Certified Through Consultation 7,600+ Times Each Year

Compliance Certified Through Permit Issuance <u>30</u> Times In <u>12 Years</u>

# VISIBILITY

Process Is <u>Closed;</u> No Hearing

No Public Participation

Process Is Open;

Public Hearing Must Be Held Environmentalists And

Public Officials May Be Invited To

Join Steering

Committees To Review And Revise Private Landowners' Plans For Use Of Their Land

# **ANTI-TRUST LAWS**

Anti-Trust Laws Do Not Apply Anti-Trust Laws <u>Do Apply;</u> No Immunity Even With Issuance Of The Permit

# **EXEMPTION**

Exemption Procedure Is

<u>Available</u> Through

Application To Endangered

Species Committee

Exemption Procedure Is Not Available

# **PROPERTY RIGHTS**

Property Rights May Be <u>Affected</u> When FWS Fails To Issue The Statement Property Rights May Be
Lost When FWS Denies The
Permit

#### Endangered Species Coordinating Council Members

(247 - 10/21/94)

ACCORD (Arizona Citizens Coalition Resource on Decisions)

Addoco, Inc.

Alabama Forestry Assn

Alabama Lamb, Wool & Mohair Assn

Alaska Forestry Assn

Alaska Mining Assn

Alaska Wool Producers Assn

Allegheny Hardwood Utilization Group

Alpine Engineered Products

American Forest & Paper Assn

American Iron Ore Assn - Cleveland, OH

American Mining Congress American Plywood Assn

American Pulpwood Assn

American Sheep Industry Women American Sheep Industry Assn

American Soybean Association

American Wood Preservers Institute

Amos-Hill Associates

Appalachian Hardwood Manufacturers,

Aristokraft, Inc. - Jasper, IN, Crossville, TN

Arkansas Forestry Assn

Arizona Cotton Growers Assn

Arizona Wool Producers Assn

Arizona Cattlegrowers Assn

Associated Oregon Loggers, Inc. Assn of Western Pulp and Paper

Workers

Atlas Pallet Corp.

B.A. Mullican Lumber & Manufacturing

B.L. Curry & Sons, Inc.

Balfour Land Co.

Bell Fibre Products

Bibler Brothers, Inc.

Black Hill Regional Multiple Use

Coalition

Black Hills Forest Resource Assn

Bohemia Mine Owners

Brownlee Lumber, Inc.

California Cattlemen's Assn

California Forestry Assn

California/Oregon Miners Assn California Wool Growers Assn Cardaco - An Alcoa Co.

Challenger Pallet and Supply, Inc. -Idaho Falls, ID

Cherry Hill Wood Products, Inc.

Clinton Pallet Co.

Coalition of Oil & Gas Associations

Coastal Lumber Co.

Coast Kange Conifers

Colorado Cattlemen's Assn

Colorado Mining Assn Colorado Timber Industry Assn

Colorado Wool Growers Assn

Conex Forest Products

Continental Lime Inc.

Culhane, John

Delaware Sheep & Wool Producers

DenPak Building Products, Inc.

Denver Reel & Pallet Co.

Dixon Lumber Co.

Duo-Fast Corp.

East Perry Lumber Co.

Econotool

Export Corporation

Farm Credit Bank of Texas

Florida Cattlemen's Assn

Florida Forestry Assn

Florida Sheep Industry The Forest Farmers Association

Garnett Co.

Georgia Cattlemen's Assn

Georgia Forestry Assn, Inc.

Georgia Mining Assn

Georgia Sheep & Wool Producers

Granite Hardwoods, Inc.

Groves Pallet Co.

Hallwood Ent.

Hardwood Manufacturers Assn

Hurder, Paul

Idaho Cattle Association

Idaho Mining Assn

Idaho Wool Growers Assn

Ihlo Sales and Imports

Illinois Lamb & Wool Producers Independence Mining Co.,- CO Indiana Sheep Industry Assn Industrial Pallet & Packaging Co. Intermountain Forestry Industry Assn International Association of Drilling Contractors International Woodworkers of America International Union of Operating Engineers International Longshoremen's Assn International Brotherhood of Painters and Allied Trades International Assn of Bridge, Structural and Ornamental Iron Workers Interstate Pallet Exchange. Inc. Iowa Cattlemen's Assn Isaacson Lumber Company Jav Dee Transport Co. Johnson Industries Kentucky Beef Cattle Assn Kentucky Forest Industries Assn Kentucky Sheep & Wool Producers Kitchen Cabinet Manufacturing Assn Kingsberry, Dennis Lake States Women in Timber Lavelle Building Materials Lewis, L.G. and Bette - Richmond, VA Litco Intl Louisiana Forestry Assn Louisiana Sheep Producers Assn Love Box Co. Mr. & Mrs. Gerald Lucas Lumberman's Assn of Texas Manufacturers Wholesale Lumber Maryland Forestry Assn Mason, Tad - Redding, CA Marriott's Incorporated - Canyonville, OR Massachusetts Federation of Sheep Assn Merillat Industries, Inc. Mezquite Maderas Procesados (NWPCA) Michigan Assn of Timberman Michigan Cattlemen's Assn Michigan Forestry Assn Michigan Resource Alliance

Michigan Sheep Breeders Assn Mid-America Lumbermen Assn Mid-Ohio Wood Products Mississippi Cattlemen's Assn Mississippi Forestry Assn Mississippi Sheep Breeders Assn Missouri Cattlemen's Association Missouri Forest Products Assn Missouri Sheep Producers Mitchell Veneers Montana Stockgrowers Assn Montana Wool Growers Assn Mullican Jr., Mr. and Mrs. Bill A. National Assn of Manufacturers National Assn of Wheat Growers National Cattlemen's Assn National Corn Growers Assn National Cotton Council National Fisheries Institute National Lamb Feeders National Lumber & Building Material Dealers Assn National Particleboard Assn National Wood Window & Door Assn National Wooden Pallet & Container Assn Nebraska Cattlemen's Assn Nebraska Sheep Council Nevada Cattlemen's Assn Nevada Wool Growers New Hampshire Sheep & Wool Growers New Jersey Wool Growers Assn New Mexico Cattle Growers New York Empire Sheep Producers Assn Nor-Cal Moulding Co. Noranda Exploration North American Wholesale Lumber Assn North Carolina Forestry Assn North Carolina Sheep Producers North Dakota Lamb & Wool Producers North Dakota Stockmen's Assn North Star Lumber, Inc. Northeastern Loggers' Assn Northern Michigan Veneers, Inc. Northwest Forestry Assn

Northwest Reforestation Northwestern Public Service Co. Oelze, Kim Oklahoma Sheep & Wool Oregon Forest Industries Council Oregon Forest Products Transportation Association

Oregon Sheep Growers Pallets Inc. Pallox, Inc. Paragon Corporation Paul Bunyan Products PFS/TECO

Pennsylvania Sheep & Wool Porter's Wood Products, Inc. Powell Industries, Inc.

Premdor

Professional Reforestation of Oregon.

Inc. - Coos Bay, OR Public Lands Council Putting People First Ranier Pallet Corporation Reel Lumber Service Rhode Island Sheep Cooperative Richardson Brothers Co. Richins, Robert and Victoria John Rock & Co. Savanna Pallets, Inc. Scott Pallets, Inc. Shadybrook Lumber Products

Sheep Producers Assn of Hawaii Shipshwewana Hardwoods Sierra Care Simplot Co. Sonoma Pacific Co.

South Carolina Forestry Assn South Carolina Sheep Industry Assn South Dakota Cattlemen's Assn Southeastern Lumber Manufacturers Association

Southern Cypress Manufacturers Assn Southern Forest Products Assn Southern Oregon Timber Industries Assn Southern Pallet, Inc.

Southern Timber Purchasers Council

StarMark Inc. Stewards of Family Farms, Ranches & Tennessee Sheep Producers Assn Texas Cattle Feeders Texas Forestry Assn Texas Sheep and Goat Raisers Texas & Southwestern Cattle Raisers Association Texas Wildlife Assn

Thomasson Lumber Co. Timber Producers Assn of Michigan and Wisconsin

Tumac Lumber Co. Tuolumne Chapter of Western Mining Council United Brotherhood of Carpenters and Joiners of America United Paperworkers International Union

United Forest Families Upham & Walsh Lumber Utah Cattlemen's Assn Utah Mining Assn Utah Wool Growers Assn Utility Workers Union of America Virginia Sheep Federation Washington Cattlemen's Assn Washington Forest Protection Assn Washington Wool Growers Assn Western Forest Industries Assn Western Mining Council Western Wood Products Assn Western Pistachio Assn Western Utah Mining Council Western Wholesale Moulding, inc. Western Wood Products Assn West Virginia Cattlemen's Assn West Virginia Shepherds Federation Wisconsin Box Co. Wisconsin Sheep Breeders Assn The Wood Company of Oxford, Inc. Wood-Mizer Products, Inc. Woodgrain Millwork, Inc. Wyoming Timber Industry Assn

# STATEMENT OF THE NATIONAL WILDLIFE FEDERATION

#### I. INTRODUCTION

The National Wildlife Federation, the Nation's largest conservation education organization, has an active and long-standing commitment to ensuring the conservation of our Nation's wealth of biological resources. Preventing human-caused extinctions of animal and plant species is a high priority for our millions of members and supporters, just as it is for countless other American citizens. The National Wildlife Federation is actively involved in species conservation, and one tool for achieving this goal is reauthorization of an effective Endangered Species Act.

This year we celebrate the twenty-first birthday of the Endangered Species Act (ESA or the Act), the crown jewel of our Nation's environmental laws. Twenty-one years after its initial passage, the ESA continues to enjoy overwhelming support. According to a recent Times Mirror survey, a whopping 77 percent of Americans either want to maintain the ESA as it is currently written or strengthen it further.

Virtually everyone agrees that we must stem the rising tide of human-caused extinctions, which is now over 1000 times the natural rate. At the June 1992 Earth Summit in Rio de Janeiro, virtually all of the world's leaders signed the Convention on Biological Diversity, thus recognizing that loss of biodiversity—the broad spectrum of species, genetic information and ecosystems—is one of the greatest threats to the natural systems that sustain us. As described in Section II, saving species under the ESA provides countless benefits to people, ranging from life-saving medicines and a plentiful food supply to healthy resource-based industries and jobs.

Actions taken pursuant to the ESA have aided in halting the decline of hundreds of fish, wildlife and plant species. The most prominent example of success is the bald eagle, our Nation's symbol, which is in the process of being reclassified from endangered to threatened throughout much of its range in the lower 48 states. Attached as Appendix 1 are examples from each state demonstrating how people have

worked to protect our national symbol under the ESA.

Remarkably, and contrary to the assertions of some, the actions taken to protect species have had no apparent adverse effect on the Nation's economic progress. The economy rises and falls without taking any notice of ESA implementation efforts. Many were quick to blame the economic slowdown of the early 1990's on the ESA. However, with no change in the Act, the U.S. economy expanded by 5.37 percent and corporate profits rose 20 percent in 1993. The ESA has a strong track record of resolving the occasional conflicts between endangered species and economic interests so that the needs of species and economic development can both be served.

The ESA is replete with provisions that allow agencies implementing the Act to balance the needs of species with the needs of development projects and other short-term economic interests. For example, the Act requires social and economic impacts to be considered when critical habitat is designated; it requires the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) to develop reasonable and prudent alternatives to projects that might otherwise be prohibited by the Act; it allows development of the habitat of listed species under "incidental take" permits and special rules for threatened species; it allows take of species introduced into the wild as "nonessential, experimental populations"; and it even provides for a complete exemption from the protections of the Act when the Endangered Species Committee finds that some other public benefit outweighs the benefit of conserving the species.

FWS and NMFS have liberally utilized the flexible provisions of the ESA to avoid placing roadblocks in front of economic activity. According to two consecutive studies by the National Wildlife Federation and the World Wildlife Fund, respectively, during the period from 1979 to 1991, FWS reviewed over 120,000 projects for conflicts with endangered species conservation pursuant to Section 7 consultation requirements, and only 34 of them—less than .03 percent—were ultimately terminated. A General Accounting Office study performed in 1992 arrived at similar conclusions. Thus, despite heated rhetoric about the ESA blocking development, the evidence suggests that the Act has been more than accommodating to the immediate needs of industry while it works to protect everyone's need for biodiversity over the long

term.

Despite the flexibility and successes of the Act, questions have been raised within Congress and elsewhere about the effectiveness of methods used for conserving endangered species, and whether these methods are sufficiently sensitive to the rights of property owners. Three major issues will face the 104th Congress as it debates reauthorization of the ESA:

• One, how to resolve the concerns of private landowners about the potential impact of the ESA on their development plans;

• Two, how to maintain broad public support for protecting species and the

ecosystems on which they depend; and

• Three, how to move beyond the costly crisis-management approach that has characterized much of the ESA's history, toward a more preventive, habitat-oriented approach.

We believe that Congress can effectively address these issues and provide for the needs of imperiled species of fish, wildlife and plants. In Section III are NWF's proposals for more incentives, certainty and access to the ESA process for private landowners. We next discuss additional ways to maintain widespread public support for the Act. Finally, we address strengthening the ESA through better habitat protections.

#### II. THE BENEFITS OF CONSERVING SPECIES

We recognize that while we offer our proposals for strengthening the law, others are calling for a drastic weakening of the ESA. This well-publicized anti-ESA campaign is driven by certain groups that seem unwilling to accept any restrictions, however carefully measured, on endangered species habitat destruction. In an attempt to sway public opinion against the ESA, they have propagated a dangerous and inaccurate myth: that endangered species protections have gone too far, placing the needs of fish and wildlife species over the needs of people. This myth completely ignores the fact that protecting fish, wildlife, and plants provides countless benefits to people.

# A. The ESA's Species Protections Help People

Every time the ESA protects a species from human-caused extinction, it serves the needs of people. Species are essential components of natural life-support systems that provide medicines, food, and other essential materials, regulate local climates and watersheds, and satisfy basic cultural, aesthetic and spiritual needs. Below are just a few examples of how endangered species protections help people.

#### 1. New medicines to respond to the health crises of tomorrow

Wild plant and animal species make an essential contribution to the \$79 billion annual U.S. pharmaceutical industry, and to ensuring that we will have medicines for our health needs. One-fourth of all prescriptions dispensed in the U.S. contain active ingredients extracted from plants. Many other drugs that are now synthesized, such as aspirin, were first discovered in the wild. Attached as Appendix 2 is a factsheet providing numerous examples of the medicinal uses of plant and animal species.

Researchers continue to discover new potential applications of wild plants and animals for life-saving or life-enhancing drugs. In fact, many pharmaceutical companies screen wild organisms for their medicinal potential. Yet to date, less than 10 percent of known plant species have been screened for their medicinal values, and only one percent have been intensively investigated. Thus, species protections are essential to ensure that the full panoply of wild plants and animals remains available for study and future use. Below are three examples of pharmaceutical benefits.

• More than three million American heart disease sufferers would find their lives cut short within 72 hours without digitalis, a drug originally derived from the purple foxglove plant.

• The endangered Houston toad, on the verge of extinction due to habitat loss, produces alkaloids that may prevent heart attacks or act as an anesthetic more powerful than morphine.

• The National Cancer Institute is now studying four plant compounds—from a Malaysian tree, a tropical vine in Cameroon, a bush from Western Australia

and a Western Samoan tree—that show promising results in stopping replication of the HIV-1 and HIV-2 viruses, the precursors to AIDS, in laboratory tests.

# 2. Wild plant species that safeguard our food supply

The world depends upon only 20 plant species, out of over 80,000 edible plant species, to supply 90 percent of its food. These plants are the product of centuries of genetic cross-breeding among various strains of wild plants. Continual cross-breeding enables these plant species to withstand ever-evolving new diseases, pests and changes in climatic and soil conditions. According to a recent study, the constant infusion of genes from wild plant species adds approximately \$1 billion per year to U.S. agricultural production. Attached as Appendix 3 is a factsheet providing examples of the many benefits to agriculture of species protection.

If abundant wild plant species were unavailable to U.S. agriculture companies for cross-breeding, entire crops would be vulnerable to pests and disease, with poten-

tially devastating repercussions for U.S. farmers and consumers.

• As noted by the Archer Daniels Midland Company in a September 1994 letter to the U.S. Senate in support of the Convention on Biological Diversity, today's U.S. wheat crop is under siege from a Russian wheat aphid. The only four known sources of resistance, which will enable the agricultural industry to create aphid-resistant wheat strains, come from wild species found in Southwest Asia.

# 3. Renewable resources for a sustainable future

At existing levels of consumption, nonrenewable resources such as petroleum will inevitably become increasingly costly and scarce in the coming decades. To prepare the U.S. for the global economy's certain transition toward renewable resources, Congress must ensure the health of the U.S. biological resource base. Fish, wildlife and plant species could potentially supply the ingredients for the products that drive the U.S. economy of the 21st century.

- According to a 1992 Newsweek article, "Potatoes—not to mention beetle carapaces, iridescent blue mussels, abalone shells, apples and other natural bounty—could well form the basis of the next revolution in what the world is made of. Having taken petroleum-based plastics and fabrics just about as far as they can, researchers in materials science are looking to nature for inspiration. The idea is not to fabricate bulletproof vests, tanks and jet wings out of lowly tubers, but rather to study natural products for clues to making materials stronger, more durable, more flexible." The substance that holds mussels to rocks through stormy seas, for example, may hold clues for a better glue to use in applications from shipbuilding to dentistry.
- The jojoba plant is a promising source of oil similar to that derived from the sperm whale. The guayule shrub is rich in natural rubber and complex resin. Both plants grow in southwestern deserts and could become significant cash crops in an area unsuitable for most other agricultural purposes.

#### 4. Early warning of ecosystem decline

Scientists have long known that the loss of any one species is a strong warning sign that the ecosystem that supported the species may be in decline. A recent study in the journal Nature reported that loss of species could directly curtail the vital services that ecosystems provide to people. A subsequent study in the same publication suggests that destruction of habitat could lead to the selective extinction of an ecosystem's "best competitors," causing a more substantial loss of ecosystem functions than otherwise would be expected.

Negative impacts in wild species often portend negative impacts for human health and quality of life. For example, some animal species are critical indicators of the

harm that heavy chemicals can cause in our environment.

• The bald eagle served as an environmental indicator of the dangers of the pesticide DDT. Efforts to stabilize the endangered bird's condition led to the discovery of the harmful shell-thinning effects of DDT on eagles and other species. DDT, which was banned in 1973, is also thought to be linked to higher incidences of breast cancer in humans.

• A National Wildlife Federation report released this year, Fertility on the Brink: The Legacy of the Chemical Age (executive summary contained in Appendix 4), demonstrates that hormone-mimicking industrial chemicals and pesticides build up in concentration as they rise up the food chain. The result is disastrous effects on multiple species, including behavioral abnormalities in lake trout, gender blurring in alligators and gulls, and an increased incidence of cancer and low sperm count among humans.

# 5. Ecosystems: Life-support systems for people

Our society has become so alienated from nature that sometimes we forget that we rely on ecosystems for our survival. Ecosystems carry out essential natural processes such as those that purify our water and air, create our soil, and determine our climate. For example:

• The Chesapeake Bay, the nation's largest estuary, not only supports 2700 plant and animal species, but also plays a major role in regulating environmental quality for humans. Rapid development around the Bay has sent countless tons of sediment downstream, landlocking communities that were once important ports. The construction of seawalls and breakwaters in some areas has led to rapid beach erosion in others. In addition, as of March 1993, the flow of industrial and agricultural toxins into the Bay was responsible for 13 advisories and four outright bans on catching or consuming certain fish and shellfish. This degradation jeopardizes important food sources, recreational activities, and numerous other benefits.

# 6. Ecosystems: Industries and jobs depend on them

Healthy ecosystems enable multi-billion dollar, job-intensive industries to thrive. When ecosystems are functioning, they also allow people to enjoy recreational opportunities, solitude and spiritual renewal. Examples of industries that are dependent on the health of ecosystems are:

• Tourism. In 1993, tourism brought in \$396.7 billion to the U.S. economy. Tourism is the fastest-growing industry in the West and the largest private employer in seven of the 11 western states.

Commercial Fishing. Apart from providing a key component of the U.S.

diet, commercial fishing is a \$3.9 billion industry.

Recreational Fishing. Nearly 36 million Americans fish for sport in the Nation's fresh and salt waters, resulting in \$24 billion in consumer spending, one

million jobs, and \$3 billion in state and federal tax revenues.

 Wildlife-Watching. The preservation of whooping crane habitat along the Platte River in Central Nebraska has generated significant economic benefit for local communities. In 1991, an estimated 80,000 crane-watchers infused more than \$15 million into the local Platte River economy. The cities of Kearney and Grand Island have both initiated festivals targeting crane-watchers in particular.

 Sauk City, Wisconsin (population 4000), a primary winter roosting area for bald eagles, draws approximately 50,000 eagle-watchers each winter, generating

an estimated \$1 million in revenues for local businesses.

• The Kirtland's warbler, unique to Michigan, provides direct economic benefits to local communities. FWS tours of warbler nesting areas increased 7 percent in 1992, drawing 775 people from 38 states and six foreign countries. The Holiday Inn of Grayling has begun marketing to warbler-watchers and the Oscoda County Chamber of Commerce held its first Kirtland's Warbler Festival in June 1994.

When ecosystems are degraded, the result is economic distress and reduced quality of life. There are many examples:

• Destruction of salmon runs on the Columbia and Snake river systems in the Pacific Northwest led to the near-collapse of that region's multi-billion dollar commercial and sport fishing industries. In New England, overfishing and the resultant crash of the fishery has cost the regional economy roughly \$350 million annually and the loss of 14,000 jobs.

 New York and New Jersey lost more than \$4 billion in the late 1980's from beach closings due to pollution. Across the country, polluted waters have led to

more than 7700 beach closings in the past 5 years.

• Every day in Florida, an average of 450 acres of forested or vegetated land is cleared, a deforestation rate about twice that of Brazil's rainforest. Meanwhile, Florida Bay and the Everglades are in serious decline due to agricultural runoff and other environmental abuses. According to the Tampa Tribune, such environmental degradation is jeopardizing the future of the state's multi-billion dollar tourism industry.

• The Laredo, Texas health department recently concluded that polluted water was responsible for the death of a boy who had been swimming in the Rio Bravo river. Nearly forty percent of U.S. waters are currently unfit for rec-

reational use.

#### B. All Species Are Worth Protecting

ESA opponents believe that we can save species selectively, based on their known value to society. For example, while many have acknowledged the importance of saving the American bald eagle, our Nation's symbol, they have harshly criticized any efforts to protect the Tipton kangaroo rat in California as favoring "rats over

people."

But this selective approach to species protection ignores everything science tells us about species and ecosystems. First, despite years of research and development, we have only just begun to discover the beneficial uses of species. Of the estimated five to thirty million species living today on Earth, scientists have identified and named only about 1.6 million species, and most of these have never been screened for beneficial uses. As species become extinct, we simply don't know what we are losing. The species that become extinct today might have provided the chemical for a miracle cancer treatment or the gene that saves the U.S. wheat crop from the next potentially devastating disease. Even the seemingly irrelevant species often surprise us:

• A "unique heat-loving microbe" discovered in a Yellowstone National Park hot spring 28 years ago is being used in blood analyses that link murder suspects to the scene of the crime.

Furthermore, species within an ecosystem are interdependent, and thus the extinction of one species potentially disrupts other species and the functioning of the entire ecosystem. According to FWS, the loss of one plant species can cause a chain reaction leading to the extinction of up to thirty other species, including insects, higher animals, and other plants. Like pulling a single bolt from an airplane wing, we cannot know beforehand what effect the loss of a single species might have on the entire ecosystem.

The importance of saving all species is widely recognized. For example, pharmaceutical, biotechnology and agricultural companies, as well as environmentalists, strongly support ratification of the Convention on Biological Diversity in recognition

of the need to conserve all species around the world.

In addition, many people believe that society should save all species for ethical reasons alone. For example, in a recent Texas survey, 80 percent of respondents stated that society has a moral obligation to future generations to protect wildlife

from extinction even if the species have no current economic value.

To meet its goal of preventing human activities from causing extinction of species, Congress will need to continue to develop creative solutions to vexing problems. Set forth below are NWF's recommendations for improving the Act. Some of these provisions are already included in ESA reauthorization bills, S. 921 and H.R. 2043, introduced in the 103rd Congress by Senators Max Baucus and John Chafee in the Senate, and Representatives Gerry Studds, John Dingell and Jim Saxton in the House of Representatives.

#### III. NWF'S PROPOSALS FOR MAKING THE ESA WORK BETTER FOR EVERYONE

The success of endangered species conservation efforts depends largely on cooperation and involvement by private and other nonfederal landowners. Roughly 50 per-

cent of listed species rely on habitat that is found exclusively on nonfederal lands. A substantial number of additional listed species rely in part on these lands for habitat. These species can only overcome threats to their extinction if private and other nonfederal landowners take a leadership role in promoting their recovery. Congress needs to enact incentives and other measures to better enable these landowners to become conservation leaders.

In addition, the federal government's own conservation obligations need more attention. By requiring more proactive species conservation by government agencies, Congress would shift more of the conservation burden from private landowners to the government. As discussed below, Congress should require Federal agencies to take preventive measures to avoid the need for listing species, resulting in fewer listed species on private as well as public lands. Congress should also require the federal government to take more aggressive measures to recover listed species, leading to delistings that would relieve private landowners of ESA responsibilities for those species.

# A. Help Private Landowners to Become Conservation Leaders

As noted above, species recovery depends upon the participation and cooperation of private and other nonfederal landowners. The question facing Congress is how to provide encouragement and workable mechanisms for nonfederal landowners to

maintain species protections.

In order to do this, Congress will first need to separate legitimate landowner concerns from those of the increasingly vocal extremists who believe that landowners should be allowed to do whatever they please with their land, irrespective of the harm they cause to their neighbors and their communities. Our society has never accepted this view of property rights. Instead, courts and legislatures have continually reaffirmed the legal principle that landowners have no right to cause harm to their neighbors or to the community as a whole. In other words, there is no "property right" to send the Nation's precious fish and wildlife species into extinction.

On the other hand, property owners who want to be good stewards of the land should not be forced to suffer from the delays or unresponsiveness that often typify a beleaguered government bureaucracy. The ESA allows owners of property containing habitat of listed fish and wildlife species to undertake development projects, so long as those projects avoid or minimize the impact on the species. People have generally accepted such reasonable limitations on the use of private property. In a recent national poll, 59 percent of those surveyed stated that land-use restrictions to protect species are justified; another 9 percent supported such restrictions depending upon the circumstances. But the ESA's provisions for private developments have sometimes been poorly implemented and sometimes appear to place an unfair burden on small landowners. Congress needs to rework the ESA to assist those landowners who simply want to do the right thing.

#### 1. Provide Incentives to Private Landowners

Habitat Conservation Plans (HCP's), developed pursuant to Section 10 of the Act, are the most promising mechanism yet created for addressing both the needs of endangered species and the development needs of private landowners. HCP's provide a mechanism wherein private development interests can work alone with the federal government, or collaboratively with other landowners and state and local governments as well, to protect habitat needed for species conservation while also opening up other areas containing endangered species habitat to potential development. (See Sections III.B.2. and III.C.2.e. for additional discussion of HCP's.)

Despite the promise of this approach, the HCP process still needs refining. The primary problems cited by property owners concerning the HCP process is that it is prohibitively expensive, time consuming, and complex. Congress can alleviate

these problems by

undertaking the following improvements to the HCP process so that there are incentives for habitat conservation.

# a. Establish a Revolving Loan Fund for Regional HCP's

Although FWS has approved a number of HCP's for individual landowners, it has devoted a great deal more attention to developing HCP's that plan for the needs of

endangered species in entire regions, such as in central Texas (the Balcones Canyonlands HCP) and in southern California (the Natural Communities Conservation Plan). By encompassing multiple species and multiple landowners, regional HCP's eliminate many of the costs and inefficiencies of which private landowners complain. Once completed, a regional HCP identifies what habitat in the region can and cannot be developed, and any future development consistent with the plan can proceed without developers having to apply for individual incidental take permits. Developers can go forward with projects without significant costs or delay, using the HCP for guidance as to what activities are allowable and consistent with conservation of the species and its essential habitat.

To encourage regional HCP's, Congress should establish a revolving loan fund for state and local entities working to address regional habitat needs of listed species. After an initial endowment of \$25 million, this fund would be self-sufficient. State and local governments would borrow from the fund to expedite development of the regional HCP. The approved regional HCP would then require developers utilizing the HCP (and benefitting from the expedited process) to contribute a user fee that

would allow repayment of the loan.

To ensure that the needs of individual species are not overlooked as the use of regional HCP's is expanded, Congress must provide necessary funding for monitoring and enforcement of the terms of the HCP's. In addition, it must ensure that recovery of the affected species is not undermined by the very terms of the HCP's. As discussed in Section III.B. below, the scientific standard for HCP's should be clarified by Congress and, in certain cases, peer review of the science underlying particular HCP's should be required.

# b. Set Up a Grant Program for Small-Scale HCP's

Small landowners with endangered species habitat may have development expectations that are frustrated due to the cost of getting an individual HCP. Although many of these frustrations would be alleviated upon development of regional HCP's, some small landowners may never receive the benefits of such HCP's. For example, in some cases state and local governments may fail to take the initiative to address

regional endangered species problems.

For small landowners without the benefit of regional HCP's, Congress should establish a grant program that provides the necessary funding for preparation of small-scale HCP's. To minimize costs and ensure fairness, Congress should limit eligibility to those without the financial resources to prepare HCP's on their own. Likewise, Congress should assign priority to landowners with development plans that have no commercial purpose. (Those who anticipate generating income from their land are more likely to be able to obtain financing for preparation of the HCP.) This program could be funded from a small percentage of the user fee account established in connection with the regional HCP program.

# c. Acquire Conservation Easements from Small Landowners

Some small landowners may not be able to prepare legally-sufficient HCP's because they have an inadequate amount of land to satisfy development and habitat requirements. For these landowners, the ESA's habitat conservation obligations

could conceivably become an obstacle to earning a living from the land.

It is difficult to determine the extent of this potential problem. To our knowledge, no one has ever shown that the ESA's habitat conservation requirements deprived a landowner of all economically viable uses of a parcel of land. Under such circumstances, the Fifth Amendment "takings" clause presumably would require compensation to be paid to the landowner. Yet no court has ever found that a Fifth Amendment takings resulted from the ESA's habitat conservation requirements. (One case alleging such a takings was recently filed in the U.S. Court of Federal Claims, but no ruling on the merits of this case has been issued.)

To address this potential problem for small landowners, Congress should amend Section 5, which provides for acquisition of lands for habitat conservation, to give priority to acquisitions from low-net-worth landowners who are precluded from implementing otherwise realistic development plans by ESA habitat protections. Moreover, the federal government should be directed to acquire conservation easements,

rather than fee title, wherever practical. Such easements can be designed to protect endangered fish and wildlife habitat while allowing the landowner to remain on the land and use it for a variety of activities consistent with habitat-conservation goals. One example of a successful conservation easement program is the USDA's Wetlands Reserve Program:

• First authorized by the Food, Agriculture, Conservation and Trade Act of 1990, the Wetlands Reserve Program allows willing farmers to protect their wetlands by selling permanent or 30-year conservation easements to the federal government. In FY 1994, Congress appropriated \$66 million for 75,000 acres in 20 states; as of April 1994, nearly 600,000 acres had been offered by farmers across all 20 eligible states.

Congress should ensure that its acquisition program under amended Section 5 is fully funded. Recent funding has been inadequate: FY 1994 funding totaled \$15.4 million, and FY 1995 funding is only \$11.8 million. As noted below in Section III.C.1.b., funds for land acquisition could be redirected from subsidies that currently promote the decline of species.

# 2. Provide Certainty to Private Landowners

For some landowners, the ESA is a source of confusion and uncertainty. These landowners have enormous fears regarding the potential impact of listings, critical habitat designations and recovery plans on their ability to use their land.

Much of this uncertainty, unfortunately, is due to inaccurate or misleading information generated by opponents of the ESA. Appendix 7 contains a compilation of "ESA horror stories" or false accusations which ESA opponents have perpetrated in the media. For example:

- Designation of critical habitat for the golden-cheeked warbler was recently turned into a political football by ESA opponents in Texas, who attempted to stir up anti-ESA sentiments by claiming that the critical habitat being considered for the songbird would span 33 counties and 20 million acres—the largest block of land designated under the ESA. In fact, the land under consideration, located in just portions of the 33 counties, amounted to only 800,000 acres—less than 4 percent of what the ESA opponents were leading local property owners to believe.
- Designation of critical habitat for the Louisiana black bear was unnecessarily complicated by "private property rights" advocates, such as the so-called Constitutional Rights Defense Group, who claimed that any development or modified use of designated lands would be prohibited. In fact, the proposal would not affect timber harvesting, hunting, trapping, camping, or any other activities not federally funded or regulated. Also, contrary to these claims, existing agricultural lands, developed lands, and marshes were not considered part of the proposed critical habitat.

But the federal government also must share the blame for the confusion and uncertainty surrounding the ESA because it has often failed to provide consistent and timely information about its implementation of the Act. The agencies charged with implementing the Act have an obligation to ensure that the people affected, or even potentially affected, are given clear, concise, and complete information to enable them to understand what is being proposed and how to plan their activities. Such information must be made easily understandable and widely accessible, and be provided in a timely manner before unsupported rumors have circulated and have unnecessarily frightened landowners.

# a. Implement broader education efforts

Congress should require that Federal agencies establish procedures for providing reliable and timely information regarding any upcoming listings, critical habitat designations or recovery plans. It should also codify a recent Clinton Administration initiative requiring that FWS and NMFS issue guidance at the time of listing regarding what constitutes take of the newly-listed species and regarding the availability of incidental take permits. Much of the fear and confusion surrounding the ESA could be alleviated simply by identifying for landowners what habitat of the

listed species is protected, and how developments in and around protected habitat can go forward.

# b. Provide reliable guarantees in HCP's

Landowners who participate in the HCP process would like as much certainty as possible. In the past, HCP's were designed in a manner that left open the possibility that the plan could be revised based on new information concerning the status of the species. Property owners presumably were less inclined to commit to conserving a parcel of land for habitat conservation in exchange for development rights if they believed that the federal government could return later to protect additional habitat.

To address this problem, Congress should direct FWS to develop an HCP approval process that would guarantee that HCP's, once approved, will not be revised in the absence of the landowner's consent. At the same time, FWS should be directed to anticipate the problem of inadequate data by requiring an appropriate margin of error for species conservation in the HCP. As a last resort, FWS could be obligated to buy a conservation easement from the landowner if the species covered in

the plan later required additional conservation measures not contained in the HCP.

# c. Provide assurances regarding unlisted species

As currently written, Section 10 authorizes HCP's only for currently-listed species, and thus landowners considering entering into an HCP may legitimately be concerned that new and unanticipated ESA obligations for other species may be imposed after the HCP is finalized. These landowners should be given the option of anticipating future listings by planning for the habitat needs of unlisted species. Congress should amend Section 10 to allow a single HCP to cover both listed and unlisted species.

Such an amendment would encourage a more comprehensive approach to HCP's, whereby the habitat needs of species that may be listed in the future are addressed together with the needs of listed species. Such an approach would have widespread benefits: it would provide greater certainty for the landowner; it would reduce the number of HCP's to be reviewed and approved by Federal agencies, thereby reducing the burden of HCP's on taxpayers; and it would provide earlier habitat protections for fish and wildlife species.

# d. Establish a Technical Assistance program

FWS and NMFS currently have no coordinated approach to ensuring that reliable information regarding the ESA and its implementation is distributed to landowners in a timely manner. To oversee public education and outreach, Congress should establish an Office of Technical Assistance within both FWS and NMFS. Using qualified personnel in field and regional offices, the Office of Technical Assistance would explain to landowners how the Act works, what constitutes take of a listed species, how incidental take permits can be obtained, how assistance in preparing HCP's can be found through grant programs and otherwise, and which landowners are qualified for federal acquisitions of conservation easements.

The Office of Technical Assistance should set up one national or several regional 1-800 telephone numbers so that landowners can easily reach the Office and be directed toward the appropriate source of information. Such a phone system could also be used as a mechanism for citizens to become more involved in ESA implementation by, for example, reporting species sightings or ESA violations. This 1-800 number approach has been used with great success by a citizen group in Alabama, The Alabama Conservancy, to identify local environmental problems.

Although the Office of Technical Assistance would require funding, an investment in better education and outreach would produce enormous returns. Many landowners express a sincere desire to protect endangered fish and wildlife, but become frustrated by the complexity of the Act and the inconsistent information that is circulated about its implementation. Such landowners might become ardent supporters of the ESA and might assist enormously in the recovery of listed species if they were given the tools and the encouragement. Congress should provide such assistance and thereby avoid costly and unnecessary conflicts between landowners and the federal government over species conservation efforts.

#### B. Maintain Public Support for the ESA

The Act currently receives strong support from the general public. Continuation of this support, however, largely depends on public confidence in the process for reaching decisions under the ESA. Four areas of the ESA could be improved to ensure that public confidence is maintained.

# 1. Require Peer Review to Ensure Reliable Science

Some of the most crucial decisions made under the ESA are science-based, and are sufficiently complex that they are not necessarily well-suited for large-scale public comment. Yet, if a scientific determination made under the Act is the subject of any substantial disagreement among scientists, public confidence in the Act can be undermined and protracted litigation can result. To address this problem, Congress should authorize FWS and NMFS to order peer review whenever a substantial scientific disagreement arises in connection with a proposed listing decision or HCP.

Peer review of proposed listings or HCP's should be designed to avoid delays that hinder species protection efforts, and should be used only in those limited cases where legitimate scientific disputes arise. A recent study of ESA listings showed that, contrary to the arguments of ESA opponents, species were not being listed unnecessarily, but were in fact generally listed only after they became so imperiled that no legitimate scientific disagreement regarding the need to list could arise. For species listed between 1985 and 1991, the median number of individuals in the species remaining at the time of listing was 1,075 for animal species and 120 for plant species—numbers that suggest species were perilously close to extinction at the time of listing.

To our knowledge, no one has performed a comprehensive study of the scientific validity of HCP's approved to date. However, HCP's are growing in numbers and scale, and are likely to affect increasing numbers of species and landowners. Thus, they are increasingly likely to be subject to political pressures and scientific disagreement. To ensure public confidence in the HCP process, Congress should direct FWS to authorize peer review of the plans whenever a substantial scientific disagreement arises.

# 2. Clarify the Biological Standard for HCP's

One potential problem with subjecting HCP's to a peer review process is the lack of a clear scientific standard against which to evaluate HCP's. To ensure that HCP's are based on reliable science, Congress should amend Section 10 to clarify the biological standard that must be satisfied in the HCP before an incidental take permit may be issued.

Currently, Section 10 states that an incidental take permit may be issued if, among other things, the taking "will not appreciably reduce the likelihood of the survival and recovery of the species in the wild." For species that have approved recovery plans, Congress should clarify this scientific standard by indicating that the taking may not appreciably reduce the likelihood of recovery, as defined in the approved recovery plan. The term "survival" should be deleted from Section 10 on the ground that it is inconsistent with the requirement that incidental taking not hinder recovery.

For species without approved recovery plans, Congress will need to provide more direction regarding the appropriate biological criteria against which the proposed HCP should be measured. Rather than delaying approval of the HCP until after the recovery plan is finalized, Congress should amend Section 4 to allow for expedited development of an interim recovery plan whenever such a plan is needed to process an incidental take permit application. Section 10 should allow issuance of the incidental take permit only if the taking does not appreciably reduce the likelihood of recovery, as defined in the interim recovery plan. Obviously, once such a biological standard is in place, FWS must ensure that adequate monitoring and enforcement mechanisms are contained within the HCP to ensure that the standard is met.

#### 3. Increase Public Participation

The ESA already provides numerous opportunities for broad public participation in decisionmaking. Listings, critical habitat designations, draft recovery plans and

incidental take permit applications are all subject to public participation and comment.

Congress should further increase public participation by giving stakeholders greater involvement in the process of implementing recovery plans. A scientific recovery team must remain responsible for delineating the species' habitat and other needs and establishing the criteria for recovery and delisting in the species' recovery plan, and must provide ongoing scientific oversight. However, a second broader planning team could be employed to help determine how best to achieve these scientific benchmarks. Because recovery plan implementation involves numerous decisions with social and economic effects on communities, Congress should authorize FWS and NMFS to enlist state, tribal and local governments, industries, environmentalists and other community leaders in designing a "Recovery Implementation Plan" that sets forth each of the steps toward achieving the biological criteria in the species' approved recovery plan. As discussed in Section III.C.2.e., this second planning team should work with each affected federal agency to develop specific action components and accompanying deadlines for that agency. The team would be required to complete the Recovery Implementation Plan within 12 months after approval of the species' recovery plan. Such broadened public participation would help ensure that timely recovery is achieved in a manner that minimizes social and economic impacts.

Another way in which public involvement could be enhanced is through public access to draft biological opinions. Biological opinions, produced during the consultation process, determine whether and to what extent Section 7's species protections will be applied to proposed federal projects. However, only federal "action agencies" and permit applicants, whose activities could be restricted by the biological opinion, have access to draft biological opinions. To broaden public involvement and maintain confidence in the process, these opinions should be made available to the public when they are released to the action agency and permit applicant for review.

# 4. Increase Accountability

Public confidence in and support for the Act can only be maintained if people believe that the Act's provisions are fairly and consistently enforced. Congress can ensure that public confidence is maintained by revising the Act's enforcement provisions in the following ways.

First, Congress should authorize FWS and NMFS to seek damages for destruction of endangered species and their habitats, when such destruction is perpetrated knowingly or through gross negligence for commercial gain. There is no reason why the public should be forced to bear the costs of restoring natural resources that have been destroyed by a knowing violator of the Act. Collected monies should be put in a fund to cover costs of restoration of the species and its habitat.

Second, the ESA should be amended to delineate a penalty structure that is based on severity of the violation. Penalties for knowing violations of the Act should be increased to ensure that persons who knowingly destroy endangered species for financial gain do not profit from their actions. At the same time, there should be significantly smaller penalties for those situations where the violation was committed unknowingly and the violator did not benefit financially from the wrongful act. Under current law, FWS and NMFS are given no guidance regarding how to tailor civil penalties.

Finally, Congress should provide an emergency exception to the 60-day notice requirement for filing suit to enforce any provision of the Act. At present, the 60-day notice requirement is waived only in suits to force an emergency listing. As the law currently stands, a citizen who discovers that a developer plans to bulldoze crucial habitat for a listed species must file a 60-day notice and then wait 60 days before seeking a preliminary injunction. During the 60-day period, the bulldozing can proceed and the species can be driven to extinction. Although the developer may later be fined for violating the ESA, this is of no benefit to the now-extinct species. It makes no sense to allow emergency lawsuits to address extinction threats to unlisted species, but not to address such threats to already-listed species.

# C. Implement Habitat Protection Measures

The ESA has achieved quite a number of remarkable feats by stabilizing or improving the condition of hundreds of species that were once on the brink of extinction. These accomplishments are particularly remarkable in light of the decline of ecosystems throughout the country, and the relatively short tenure, at least in ecological terms, of the Act. However, except for a few high-profile species, where FWS and NMFS have devoted substantial attention and resources and accomplished a great deal, the federal government has yet to achieve the ultimate goal of the Act—to bring species to the point where they no longer need the protection of the ESA.

At present, within the U.S. over 295 Category 1 candidate species await listing decisions, and over 3790 additional Category 2 candidates await further research into their status. Moreover, as of September 1992, FWS had only developed and approved recovery plans for 410 of the 711 listed species that were under its jurisdiction; to date, NMFS has only approved plans for 11 of the 25 species under its jurisdiction. More importantly, inadequate attention has been given toward implementing species recovery. Thirty-three percent of listed species within FWS's jurisdiction as of September 1992 were in decline, and FWS does not even have sufficient data to determine the status of another 27 percent. These statistics suggest that the federal government has been operating in crisis mode, unable to keep up with its ESA responsibilities.

Many of the federal government's difficulties can be attributed to inadequate funding. The task of recovering the 897 U.S. species listed as of August 1994, and the many more species awaiting listing decisions, is enormous, and annual appropriations have been far too low to allow this task to be properly addressed. The lack of adequate funding is also responsible for creating unnecessary conflict with private landowners, whose development plans are sometimes delayed due to FWS's or NMFS's inability to promptly respond to questions or process permit applications. For the benefit of both endangered species and private landowners, Congress needs to increase funding of the endangered species program. Investing now will ensure that U.S. taxpayers do not pay much more in the future, both in terms of dollars and reduced quality of life.

But the lack of adequate resources only partly explains the federal government's general failure to achieve the recovery goal. Even if appropriations were increased substantially, the government would continue to struggle with the decline of species

because it utilizes a costly and ineffective "emergency room" approach.

As biologists have emphasized for years, the most effective way to protect species is to prevent them from reaching a state of crisis in the first place. Fish and wildlife need habitat for the basic functions of their everyday lives—breeding, feeding, and taking shelter. Because most species are in crisis due to habitat modification and destruction, species decline can only be stemmed by implementing better habitat protections and tailoring development to minimize adverse impacts on habitat.

#### 1. Avoid the Need for Listing Species

Virtually everyone recognizes that our chances of recovering a species are much better if we intervene before the species' condition has declined to such an extent that ESA protections are needed. Yet, as currently written, the ESA provides very little direction to the federal government on how to avoid the need for listing species. The only substantive provisions that provide benefits to unlisted species are the critical habitat protections in Section 7 and the protection of habitat that FWS has undertaken pursuant to Section 9's "harm" prohibition. These provisions confer an indirect benefit on unlisted species by protecting habitat shared by listed and unlisted species.

Congress should call for more proactive efforts from federal, state, and tribal governments in preventing the decline of unlisted species. The ESA should be amended in the following ways to enhance their roles in this crucial area. (As discussed earlier in Section III.A.2.c, the role of private entities in preventing species decline

should similarly be enhanced through multispecies HCP's.)

a. Ensure that federal lands carry a greater proportion of species conservation responsibilities Federal lands should serve as the first line of defense in preventing the endangerment of species. If federal lands were better used for conserving species

and their habitats, many of the burdens that currently fall on private landowners to prevent extinctions would be relieved. Currently, our natural resource management agencies are allowing too much habitat on public lands to be degraded by environmentally-destructive uses.

The federal government has an unprecedented opportunity to increase its conservation efforts on federal lands through the military base closure process. Under the 1994 Defense Authorization and President Clinton's Five Point Plan for Economic Stimulus in Communities with Base Closures, FWS and other Federal agencies can potentially take over management of former military lands for a variety of

public purposes, including habitat conservation.

The lands made available as a result of base closures include thousands of acres that are irreplaceable storehouses of biodiversity. Listed and unlisted fish, wildlife and plant species can often be found in nearly pristine habitats. For example, the Loring Air Force Base in northern Maine contains extensive wetlands and a diverse mammal population that includes bear, moose, beaver and otter. Fort Wingate, an Army base in New Mexico, has approximately 6000 acres of undisturbed forests and other wildlands that support a broad diversity of wildlife populations.

Congress should promote the conservation of habitat on former military lands, as well as allow for compatible uses such as recreation, by providing FWS with the necessary funding to assume management of such lands. Such an investment will produce enormous savings by avoiding the need for listings, by promoting the recovery of listed species, and by reducing the need for ESA enforcement on private

lands.

# b. Encourage pre-listing agreements to conserve habitat

Another way to prevent endangerment and relieve private landowners' conservation responsibilities under the ESA is to ensure that Federal agencies operate their existing programs in a way that protects species not yet listed. The fact that so many species are in decline and in need of ESA protection highlights the need for more proactive conservation efforts by Federal agencies.

Fortunately, some of our Federal agencies are beginning to realize the importance of preventive conservation efforts. For example, under its Sensitive Species Program, the Forest Service has identified 2300 sensitive plants and animals species of concern, and has begun the process of implementing habitat conservation strategies to reverse their decline. The Bureau of Land Management also has established a sensitive species management program. However, the Bureau has been much slower to integrate such preventive species conservation measures with their commodity programs, such as oil and gas leasing and livestock grazing.

Pre-listing conservation efforts on public lands should be given greater priority and resources. Congress should direct all Federal agencies to inventory their lands for candidate and declining species, and enter into voluntary agreements with FWS

and NMFS that contain specific measures to promote recovery.

State and tribal governments have long engaged in efforts to protect the fish, wildlife and plant species on their lands and in their waters. Despite these efforts, numerous species with habitat on state and tribal lands are in decline and, if no intervening steps are taken, will ultimately need to be listed under the ESA. The federal government should assist states and tribes in obtaining the resources they need to conserve the habitat of species not yet listed. Some joint pre-listing efforts are already underway:

• The Forest Service, FWS, and Virginia and West Virginia state conservation agencies have entered into an agreement to coordinate protection efforts for the Cow Knob salamander, a candidate species found only in the Shenandoah Mountains. The George Washington National Forest has set up a 43,000 acre area to conserve rare habitat and entered into a challenge cost-share agreement with a local herpetologist to assess the salamander's habitat needs. Implementation of these agreements is expected to protect at least 90 percent of the known population of the salamander and avoid the need to list the species under the ESA.

FWS and NMFS should be encouraged to enter into pre-listing agreements with state and tribal entities that provide substantial Section 6 funding for habitat con-

servation for species not listed under the Act. As a condition of funding, such agreements should require recipients to engage in careful inventories of existing resources and to report on the progress of habitat conservation measures. State and tribal governments should have the power to shape pre-listing conservation programs, but future funding of these programs should be determined by whether they meet objective measures of success. Obviously, species which meet the listing criteria, such as Category 1 candidate species, should be listed. Pre-listing agreements should be focused on preventing the decline of species that have not yet met this threshold.

To enable such proactive conservation measures, Section 6 funding for states will need to be significantly increased, and a new allocation of funding for tribes will need to be established. Despite the up-front costs, pre-listing agreements would produce enormous cost savings and efficiencies for federal, state and tribal governments. Efforts to protect unlisted species through habitat conservation measures would avert the need to list those species and others in the same ecosystem. The need for consultations under the ESA would be avoided, and the likelihood of ESA lawsuits would likewise diminish.

# c. Terminate programs that subsidize extinction

In program after program, the federal government offers subsidies to industries engaged in large-scale resource consumption without requiring any habitat conservation efforts. These subsidies are incentives to destroy habitat and to pollute the land, air and water. This situation is unacceptable from both an environmental and economic perspective: in essence, taxpayers pay for federal programs that facilitate sending species to the brink of extinction, and then pay again for federal programs that attempt to recover these species. Taxpayers would be better off if this money were instead spent directly on environmental conservation.

Attached as Appendix 5 is a factsheet that identifies the most environmentally-destructive federally-subsidized activities and the cost to the U.S. taxpayer of subsidizing these activities. The total cost of these programs, excluding the cost of remedying the resulting environmental destruction, is at least \$1 billion per year. The additional harm to society of resulting species extinctions is, of course, incalculable.

Although biologists rarely attribute a species' decline to a single cause, certain federally-subsidized activities clearly play a role in the decline of species. For example:

• Grazing Subsidies. According to a June 1994 study prepared by the National Wildlife Federation, Grazing to Extinction (executive summary contained in Appendix 6), federally-subsidized livestock grazing on public lands is a significant factor, or is likely to be a factor, in the decline of nearly 350 listed and candidate fish and wildlife species and innumerable listed and candidate plant species.

• Flood Insurance. Through the federal flood insurance program, taxpayers are unwittingly subsidizing the destruction of essential habitat of fish and wildlife species (and encouraging high-risk development which must then be rebuilt at taxpayer expense after floods and hurricanes). For example, in Florida Key Deer v. Stickney, a federal court concluded that the availability of federally-subsidized insurance facilitated destruction of the endangered Florida Key deer's habitat.

• Water Projects. Federally-subsidized water development projects stimulate activities that are detrimental to many plant and animal species. Irrigation and hydropower projects built with interest-free debt that provide below-cost water at taxpayer expense have driven many salmon stocks and other native species to the brink of extinction. These projects contribute to the degradation of habitat, depletion of groundwater supplies, salinization of soils, contamination of water, and pollution of wetlands.

• Animal Damage Control. In 1992, the U.S. Department of Agriculture's Animal Damage Control (ADC) agency, with a budget of roughly \$35 million, destroyed 2.2 million wild animals in response to complaints of wildlife-caused property damage. ADC's control efforts sometimes destroy non-target animals, including species protected under the ESA. For example, in one incident in

1992, the ADC's poisoning of a coyote caused the "ancillary" or "non-target" killing of six golden eagles and one bald eagle.

Congress needs to bring an end to federal subsidies of activities that cause extinction and put federal programs at cross purposes. Congress should direct each agency with programs that offer subsidies resulting in habitat destruction to: (1) identify the programs' adverse effects on listed and unlisted fish, wildlife and plant species; and (2) as a prerequisite for receipt of any subsidy, require habitat conservation measures that eliminate such adverse effects. The end result of this policy would be the termination of these subsidies altogether or the modification of these programs so that they are environmentally sound.

Termination of the subsidies identified in Appendix 4 would save billions of dollars for U.S. taxpayers both from reduced subsidy outlays and reduced costs of endangered species conservation and environmental restoration costs. Funds redirected from damaging subsidies could be used to pay for the numerous ESA habitat restoration and protection measures that are currently drastically underfunded.

## 2. Promote Recovery of Listed Species

As noted above, loss of habitat is a primary cause of species extinction. Thus, it should be no mystery why so few listed species have recovered: the federal government has failed to conserve the habitat of the large majority of listed species. The ESA's provisions for achieving conservation of species should be amended in the following ways to ensure that the essential habitat of listed species is protected.

a. Clarify that consultation shall ensure recovery, not mere survival Section 7(a)(2) sets forth the consultation process, one of the most important features of the Act for promoting recovery of species. It requires that Federal agencies ensure, through consultation with FWS and NMFS, that actions they carry out, fund or approve do not either jeopardize a listed species' existence or adversely modify its critical habitat. Applying the jeopardy and adverse modification standards, Federal agencies can evaluate and, if necessary, modify federal projects to ensure that they do not contribute to a species' extinction.

Unfortunately, FWS and NMFS have not interpreted the jeopardy and adverse modification standards in a manner that assists recovery of listed species. Under current regulations, a federal action requires jeopardy or adverse modification protections only if the project hinders "survival" of the species.

The federal government has not attempted to define "survival" in the ESA and its implementing regulations. Thus, the federal government has given itself virtually unfettered discretion to allow destructive federal projects to proceed without

modification through the ESA consultation process.

The Act was not designed to allow the Federal agencies such unchecked discretion. According to Section 2, the ESA was designed "to provide a program for the conservation of . . . endangered species and threatened species." "Conservation" is defined by the Act as "the use of all methods and procedures which are necessary to bring any [listed species] to the point at which the measures provided pursuant to this Act are no longer necessary." That is, the agencies are required to operate their programs for the purpose of recovering species, not merely for perpetuating their continued survival in the endangered or threatened category.

The ESA is quite specific with regard to the protection of critical habitat. It defines critical habitat as "the specific areas . . . on which are found those physical or biological features . . . essential to the conservation of the species." (Emphasis supplied.) By inference, the rule against adverse modification of such habitat precludes action that hinders conservation (i.e., recovery), not just action that hinders

survival.

Congress needs to amend the ESA to clarify that the consultation process must be used to promote recovery. It should direct FWS and NMFS to find "jeopardy" if a project hinders the recovery of a listed species and "adverse modification" when the project alters habitat to the detriment of a species' recovery. This will ensure that the consultation process is used effectively to recover species—as it was origi-

nally intended—rather than for mere paper-pushing exercises that allow destructive

projects to go forward without modification.

Making recovery, rather than mere survival, the goal of the consultation process would undoubtedly lead to an increased number of consultations. This should be viewed as a favorable outcome by Congress: as species and ecosystems decline and biological resources become increasingly scarce, the federal government will want to "look before it leaps" into projects that threaten species extinction. As is done to ensure survival, to ensure recovery the agencies could devise "reasonable and prudent alternatives" to the project location or design that minimize the impact on listed species and their habitats. Preventing needlessly destructive projects in this manner would be far less expensive than cleaning up their aftermath.

# b. Ensure that "cumulative effects" are considered during consultation

Under current federal regulations, FWS and NMFS are not required to consider the cumulative effects of multiple proposed federal projects in determining whether a particular project will cause jeopardy or adverse modification. When a project is evaluated during the consultation process, its impacts are considered along with the impacts of planned nonfederal activities, but the impacts of planned federal activities are not considered. The rationale for excluding future federal projects from consideration is that such projects will be considered in future Section 7 consultations.

Yet the combined and synergistic effects of multiple federal activities in the same area have the potential to cause enormous damage to the habitats of listed species. Failure to consider these combined effects at the earliest possible juncture results in a gradual but certain reduction of endangered species habitat and recovery potential. Congress should require FWS and NMFS to consider the cumulative effects of all existing and planned federal and nonfederal activities in the affected area when consulting or conferring under Section 7.

c. Require that Federal agencies abide by the same incidental take rules that apply to private landowners

If FWS or NMFS finds during a Section 7 consultation that the proposed project will not cause jeopardy or adverse modification, or they identify reasonable and prudent alternatives to the project that will not cause jeopardy or adverse modification, FWS or NMFS has the authority under Section 7(b)(4) to allow "incidental take" of the listed species. This Section 7 authority to issue an incidental take statement is similar to the provision for an incidental take permit for nonfederal entities under Section 10. Yet a Section 7 statement may be issued in situations where a Section 10 permit would not be issued due to adverse impacts on the species' prospects for recovery. For example, as a condition of an incidental take permit for private landowners, Section 10 requires mitigation of impacts. Section 7 contains no similar requirement for Federal agencies or federal permit applicants.

Also, if subsequent to the issuance of a Section 10 incidental take permit, the private landowner fails to comply with its terms and conditions, Section 10 requires FWS or NMFS to revoke the permit. Section 7 does not expressly mandate such a sanction for noncompliance by Federal agencies or federal permit applicants. As a result, when the level of take of a listed species exceeds the amount allowed by an incidental take statement, FWS and NMFS do not enforce the requirements of the incidental take statements. They simply call for re-initiation of consultation, while continuing to allow levels of take that they had previously concluded were unduly

harmful to the species' recovery. For example:

• During the 1994 summer shrimping season, 347 Kemp's ridley sea turtles washed ashore, presumably from drowning in the nets of shrimping trawls. Despite the fact that the allowed incidental take of the shrimp fishery was exceeded by 3500 percent, and the fact that these deaths represent a major impact to this critically endangered species, NMFS has not issued a jeopardy opinion. Instead NMFS has re-initiated consultation twice while the drownings continue to occur.

Congress should amend the ESA to ensure that if the level of incidental take specified in the biological opinion is surpassed as a result of permitted activities, or all necessary measures described in the initial opinion are not implemented, then the

permit will be held in abeyance and project operations suspended until FWS or NMFS and the permitting federal agency can re-initiate Section 7 consultation and design additional modifications to preclude jeopardy. The permitted activity could continue once measures are implemented to bring take down to allowable levels.

Federal agencies and permit applicants should not be allowed to undermine recovery through incidental take, especially considering that private landowners are required to meet a higher standard. Congress should require these entities to meet similar criteria under Section 7 as are required for private landowners under Section 10.

# d. Require that recovery plans be finalized and implemented

The reasons a species becomes threatened or endangered are often complex, involving intertwined issues of biology, economics and politics. Thus, the process of bringing a species to the condition where it no longer needs the protections of the ESA can often be daunting. The best hope for recovering any listed species is the development and implementation of a recovery plan that confronts the biological, economic and political roadblocks.

Under Section 4, FWS and NMFS are required to develop and implement recovery plans for listed species. However, as of September 1992, FWS had developed plans for only 410 of the 711 listed species. At that time, of the listed species found to be still in decline, 58 percent lacked approved recovery plans; 66 percent of listed species with unknown status lacked recovery plans. Few, if any, of those plans have been fully implemented.

To ensure that listed species are ultimately recovered, Congress needs to take several steps to improve development and implementation of recovery plans. The first crucial step will be to substantially increase funding of recovery efforts. In fiscal year 1994, Congress appropriated a mere \$30 million for recovery, an amount that simply does not allow FWS and NMFS to focus sufficient attention on this essential area.

Second, Congress should direct FWS and NMFS to develop multispecies recovery plans, including both listed and Category 1 candidate species, whenever possible. This will help ensure that the agencies broaden their focus from individual species to the ecosystems on which species depend. It will also ensure that limited recovery dollars are utilized more efficiently.

Third, Congress should direct FWS and NMFS to eliminate the backlog of species without recovery plans by requiring development of plans for all listed species as soon as possible. To ensure that this backlog does not resurface, Congress should require that the agencies develop recovery plans within 18 months after listing for all species listed after ESA reauthorization.

Fourth, as discussed in Section III.B.3., Congress needs to establish public participation procedures for developing "Recovery Implementation Plans" so that all interests affected by any proposed recovery plan can be addressed and accommodated to the greatest extent possible. The deadline for completing Recovery Implementation Plans should be 12 months after approval of the recovery plan.

Finally, Congress needs to clarify the responsibility of all Federal agencies in implementing recovery. Section 7(a)(1) currently requires all agencies to carry out programs for the conservation of listed species. However, the language of Section 7(a)(1) is so vague that the courts have interpreted it as being virtually unenforceable. Congress should amend Section 7(a)(1) to clarify that Federal agencies engaged in programs affecting a listed species are responsible for preparing and implementing action components of the Recovery Implementation Plan. The agencies should be directed to utilize the biological standards in the approved recovery plan, and to establish a specific and enforceable timetable for implementation.

# e. Codify the rule against destruction of essential habitat on state and private lands

As noted above, a majority of listed species rely on nonfederal lands for habitat. Thus, the recovery of a majority of listed species is dependent upon the conservation of habitat on nonfederal lands and on the participation and cooperation of private and state landowners.

Since the mid-1970's, the federal government has protected habitat of endangered species on nonfederal lands by enforcing Section 9 of the Act. Section 9 prohibits causing "harm" to endangered species, and FWS has correctly interpreted this prohibition as follows:

Harm in the definition of "take" in the Act means an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

For nearly 20 years this regulation, often referred to as the "harm rule," has served as the linchpin of habitat protection efforts for endangered fish and wildlife on non-federal lands.

This longstanding ESA protection was recently called into question by a court decision in *Sweet Home v. Babbitt*. In that case, a 2-1 majority of a D.C. Circuit Court of Appeals panel held that FWS did not have the authority under Section 9 to prohibit habitat destruction. According to the court, the only habitat protected by the ESA is Section 7's "critical habitat." The court concluded that Congress intended to protect habitat not covered by Section 7 through land acquisition.

The Clinton Administration has continued to enforce the "harm" rule outside of Washington, D.C., electing to follow circuit court rulings that conflict with Sweet Home. But in light of the conflicting rulings among the circuits, Sweet Home likely will be reviewed by the U.S. Supreme Court in its 1994-95 term. And although the reasoning of the D.C. Circuit court in Sweet Home has many flaws, the decision could be upheld. Congress should thus clarify its original intent by codifying the harm rule.

Codification of the harm rule, and rejection of the Sweet Home approach, is necessary to prevent a massive extinction of endangered species on nonfederal lands. If Sweet Home is upheld, private landowners' longstanding responsibility for conserving the essential habitat of endangered fish and wildlife species would largely disappear. Moreover, Section 10's "incidental take" provisions, under which a landowner may develop land containing endangered species habitat pursuant to an HCP, would be rendered virtually moot. Landowners would have no obligation to prepare an HCP prior to developing land containing endangered fish and wildlife unless the development would directly kill the animal. In other words, they could proceed with development in total disregard of the habitat needs of endangered fish and wildlife. Habitat of any mobile species that could physically move out of the way of development projects would not be protected.

Congress needs to codify the harm rule in order to reaffirm the importance of the HCP process. The HCP process is still in its infancy—only 36 HCP's have been developed to date, and another 150 are in various stages of development—and, at this early stage of development, some adjustments are probably in order. Some landowners complain that the process is too expensive and time-consuming, and environmentalists have criticized the process as neglectful of species' recovery needs. (In Sections III.A. and III.B., NWF proposes measures for expediting and assisting landowners with HCP's and for ensuring that HCP's properly address recovery needs.) But despite these concerns, virtually everyone recognizes that HCP's provide an essential mechanism to ensure that the public's interest in species protection and private landowners' interests in development are both served.

Congress should reject the Sweet Home approach because it offers no real alternative to HCP's. Under the reasoning of the Sweet Home court, the enforceable standards imposed by the harm rule would be removed and the federal government would rely entirely on taxpayer funded land acquisitions to protect habitat on nonfederal lands. As discussed earlier in Section III.A.1.c., we strongly advocate using land acquisitions (particularly, acquisition of conservation easements) as a means of conserving habitat on nonfederal lands. But total reliance on this mechanism would be both impractical and unfair.

First, in today's federal budgetary climate, U.S. taxpayers would be unlikely to support substantial increases in expenditures for land acquisition. Increased expenditures would be particularly unacceptable because the federal government would be using land acquisitions to achieve an objective that is already being achieved through private landowner conservation efforts.

Second, U.S. taxpayers would never tolerate a significant cash transfer to wealthy owners of endangered species habitat. Large corporations and other wealthy entities own most of the private land in this country—a full 75 percent of private land is owned by a mere one percent of the population. Presumably, such wealthy interests likewise own most of the habitat of listed species on private lands. Transferring taxpayer dollars to these entities for a service that they already provide in fulfilling their stewardship responsibilities would simply be irresponsible.

Clearly, some combination of incentives and mandates are needed. We recommend building on the success of the HCP process to guide development of nonfederal lands containing endangered species habitat. As discussed earlier, the HCP process can be tailored to provide needed financial incentives and certainty to private landowners, while maintaining longstanding conservation obligations. An improved HCP process would be far more equitable for U.S. taxpayers than the Sweet Home approach and would be far more effective in broadening the constituency of landowners working cooperatively to conserve habitat of listed species. To ensure successful implementation of HCP's, Congress must reaffirm landowners' habitat conservation obligations by codifying the harm rule.

# f. Ensure designation of critical habitat

Another mechanism for conserving essential endangered species habitat is designation and protection of "critical habitat." Congress sought to confront directly the problem of habitat loss with the concept of critical habitat when it enacted the ESA in 1973. It placed a specific requirement in Section 4 that FWS and NMFS designate critical habitat at or near the time of listing, and required under Section 7(a)(2) that all Federal agencies ensure that critical habitat is not adversely modified by their actions.

Section 4's requirement of critical habitat designation plays an essential role in educating the public regarding the habitat needs of listed species and regarding what activities would adversely affect such essential habitat. In the absence of any designation, listing of a species would not necessarily give it any true protection, since most people presumably would continue their normal development activities without any knowledge of the impact on the listed species. The designation requirement ensures that the essential habitat of listed species is not destroyed as a result of pure ignorance.

Section 7(a)(2)'s prohibition against adverse modification of critical habitat is likewise crucial to the recovery of species because it requires that federal projects be reviewed and, if necessary, redesigned to ensure that they do not undermine recovery. (As discussed in Section III.C.2.a., Congress needs to clarify that the adverse modification standard should be implemented to promote recovery, not mere survival.) But this adverse modification rule can only be effective if critical habitat has been designated.

FWS and NMFS have repeatedly failed to designate critical habitat despite its vital importance for the recovery of species. Nearly seven out of eight listed species have not had critical habitat designated. In many instances, the federal government has cited the statutory exceptions to the designation requirement, finding either that designation was "not prudent" and or that habitat was "not determinable." But subsequent analyses of these refusals to designate show that the statutory exceptions simply did not apply in many cases; instead the refusals were driven by nonstatutory, political factors. Unfortunately, misinformation regarding the purpose and impact of critical habitat and resulting controversies have contributed to the reluctance of FWS and NMFS to designate critical habitat.

The federal government's refusal to designate critical habitat has had a devastating effect, pushing numerous listed species into ever-smaller pockets of unprotected habitat and eventually into extinction. For example:

• FWS refused to designate critical habitat for the threatened gopher tortoise, asserting without basis that designation would be "not prudent" due to the risk that the habitat would be vandalized. It now allows military tanks to maneuver on thousands of acres of crucial tortoise habitat, even though such maneuvers unquestionably adversely modify the habitat.

Congress needs to take corrective action to ensure that critical habitat designations are made. First, FWS and NMFS must develop procedures for better communicating the purposes of critical habitat and its specific impacts in an area to the general public before ESA opponents have misled the public with false allegations of the impacts of designation.

Second, FWS and NMFS should be required to provide information to Congress regarding the types of situations where critical habitat designation is detrimental to a listed species or otherwise impractical. Congress should use this information to define precise and narrow exceptions to the requirement for designating critical habitat, and require that such exceptions be used by FWS and NMFS only when supported with specific factual findings.

Congress should also direct FWS and NMFS to immediately address the current backlog of species awaiting critical habitat designations, and provide these agencies with the resources necessary to do so. Given that the habitat protections of the jeopardy standard and the harm rule have not been properly or fully implemented, criti-

cal habitat protection is particularly important at this time.

Reauthorization of an effective Endangered Species Act is in the best interest of everyone involved. Species provide untold benefits to humans and are essential to our quality of life. By making thoughtful improvements to the Act, we can enable private landowners to take a greater conservation role, and thereby provide for both species conservation and sustainable development—for the benefit of each of us and generations to come.

#### ANNOTATED BIBLIOGRAPHY

ESA Implementation and Enforcement

Austin American Statesman, 12 and 29 July 1994.

Covers golden-cheeked warbler critical habitat situation.

Barry, Donald, Leslie Harroun, and Christine Halvorson. For Conserving Listed Species, Talk is Cheaper than We Think: The Consultation Process Under the Endangered Species Act. World Wildlife Fund, February 1992.

Analyzes Section 7 consultations 1987-1991.

Center for Marine Conservation. Draft Letter to President Clinton concerning Texas Sea Turtle Strandings. 4 October 1994.

Points to the dramatic increase in endangered sea turtle deaths and asserts the need for greater ESA compliance and enforcement.

Constitutional Rights Defense Group. Constitutional Rights Defense Group Workbook.

Presents ESA opponents' arguments in favor of blocking critical habitat designation for IA black bear.

- Endangered Species Act of 1973 As Amended through the 100th Congress. Pub.L. 93-205, Sec. 2, Dec. 28, 1973, 87 Stat. 884; Pub.L. 96-159, Sec. 1, Dec. 28, 1979, 93 Stat. 1225; Pub.L. 97-304, Sec. 9(a), Oct. 13, 1982, 96 Stat. 1426; Pub.L. 100-478, Title I, Sec. 1013(a), Oct. 7, 1988, 102 Stat. 2315.
- Feierabend, J. Scott, Christopher H. Meyer and Diane M. Debinski. Statement of the National Wildlife Federation before the Subcommittee on Environmental Protection of the Senate Committee on Environment and Public Works on Reauthorizing the Endangered Species Act S. 675. 7 April 1987.

Contains statistics on Sections 7 Consultations from 1979 to 1986.

Florida Key Deer v. Stickney, 1994 WL 515901 (S.D. Fla., August 25, 1994).
Relates flood insurance to species endangerment.

Geisler, C. "Land Ownership." Rural Sociology 58, no. 532 (Winter 1993).
Contains statistics on land ownership distribution.

Hauck, Oliver A. "The Endangered Species Act and its Implementation by the U.S. Departments of Interior and Commerce." University of Colorado Law Review 64, issue 2 (1993): 278-370. Studies sections 4, 7, 9 and 10 of the ESA. Cites failure to designate critical habitat for threatened gopher tortoise as illustrative example.

Hussey, Stephanie L. "Wetlands Reserve Program: A Lifeline for Fisheries." Fisheries 19, no. 8 (August 1994): 42.

Synopsis of the Wetlands Reserve Program.

Meridith, Denise, Deputy Director, Bureau of Land Management. Written testimony before the Subcommittee on Clean Water, Fisheries and Wildlife Committee on Environment And Public Works, United States Senate, regarding Endangered Species Conservation on Public Lands. 29 September 1994.

Outlines BLM endangered species conservation efforts.

National Heritage Data Center Network. Perspectives on species Imperilment (revised printing). The Nature Conservancy, 1993.

Provides data on distribution of endangered species by land ownership.

National Marine Fisheries Service. Telephone conversations, October 1994.

Furnished number of threatened and endangered species under NMFS jurisdiction and how many have approved recovery plans.

Pearlstein, Steven. "A very little something extra; inflation, corporate profits to overshadow 1993's modest pay raises," The Washington Post, 26 August 1994, B1. Cites growth in corporate profits for 1993.

Sweet Home Chapter v. Babbitt, 17 F.3d 1463 (D.C. Cir 1994).

Discusses harm rule definition and its implications for habitat protection.

Unger, David G., Associate Chief, U.S. Forest Service. Written testimony before the Subcommittee on Clean Water, Fisheries and Wildlife, Committee on Environment and Public Works, United States Senate, concerning Endangered Species Conservation on Public Lands. 29 September 1994.

Outlines Forest Service endangered species conservation efforts.

U.S. Department of Commerce, Bureau of Economic Analysis. Telephone conversation, October 1994.

Furnished GDP figures for 1992 and 1993 for calculating 1993 economic growth as percent change in GDP as measured in current dollars.

U.S. Fish and Wildlife Service, Endangered Species Division. Telephone conversations, October 1994.

Provided current numbers of threatened, endangered, category 1 candidate and category 2 candidate species; also furnished data on completed and ongoing Habitat Conservation Plans.

U.S. Fish and Wildlife Service. Report to Congress, Endangered and Threatened Species Recovery Program. December 1992.

Reports on status of endangered species recovery efforts.

U.S. Forest Service, Department of Wildlife, Fish, and Rare Plants. George Washington National Forest Implements Ecosystem Approach to Protect Rare Salamander. Internal memorandum.

Gives details about the pre-listing conservation agreement for the Cow Knob salamander.

U.S. General Accounting Office. Endangered Species Act: Types and Numbers of Implementing Actions. GAO/RCED-92-131BR, May 1992.

Gives Section 7 consultation and other implementation-related statistics for 1987–1991.

Wilcove, David S., Margaret NcMillan and Keith C. Winston. "What Exactly is an Endangered Species? An Analysis of the U.S. Endangered Species List: 1985–1991." Conservation Biology 7, no. 1 (March 1993): 87-93.

Documents number of individuals per species remaining at time of listing.

Public Support for Species Protection

Bannon, Brad and John Kirincich. Memo to interested parties regarding September-October 1994 polling for Public Citizen on endangered species. 8 October 1994.

Communicates polling data which indicates Texans' support for endangered species protection.

KRC Communications Research for The Nature Conservancy. "Natural Concerns: How Americans feel about protecting the environment," Asheville Citizen-Times, 9 October 1994, 8A.

Presents polling data on Americans' concern for the environment and their feelings about land-use restrictions to protect species.

Rabiroff, Jon. "More than 150 callers dial Conservancy's watchdog line." The Birmingham News, 19 September 1994.

Covers the Alabama Conservancy's 1-800 number for environmental con-

Roper Organization Inc. Natural Resource Conservation: Where Environmentalism is Headed in the 1990s: the Times Mirror Magazines National Environmental Forum Survey. Times Mirror Magazines, June 1992.

Provides polling data on Americans' views on endangered species regulations.

The Value of Conserving Species

Begley, Sharon, and Carolyn Friday. "Nature at the Patent Office," Newsweek, 14 December 1992, 74.

Discusses the potential of biomimetics, the science of mimicking biological materials.

Buffet, Howard G. Letter to select U.S. Senate staff, 19 September 1994.

Urges ratification of the Convention on Biological Diversity on behalf of Archer Daniel. Xidland Company, citing agricultural importance of acce. . to foreign germ plasm.

Clifford, F. "Simpson Case boosts microbe conservation," Los Angeles Times, 31 August 1994.

Cites unique Yellowstone microbe used in blood analyses.

Egan, Timothy. New York Times, 18 September 1994.

Reports the growing importance of tourism in western states.

Mathews, Jessica. "Rights to Life: the biodiversity treaty gives countries the incentive to make the most of their genetic resources," The Washington Post, 24 April 1994.

Illustrates the merits and profitability of preserving biodiversity.

Myers, Norman. The Sinking Arc. Elmsford, NY: Pergamon Press, 1979. Examines the troubling implications of biodiversity loss.

Pharmaceutical Manufacturers Association. 1990-1993 Annual Survey Report: Trends in U.S. Pharmaceutical Sales and R&D. October 1993.

Provides U.S. pharmaceutical 1993 domestic and international revenue figures.

Tampa Tribune, 28 and 29 August 1994.

Contains a series on the general decline of Florida's environment and it. potential effect on tourism.

U.S. Fish and Wildlife Service, Division of Endangered Species, Region 3. Internal document, 4-5.

Provides information on Kirtland's warbler tourism.

U.S. Fish & Wildlife Service, NE/KS office. Letter to Suellen Lowry concerning the endangered species program in Nebraska, 6 April 1994.

Provides information on whooping crane tourism.

- U.S. Fish and Wildlife Service. Why Save Endangered Species. Discussea the benefits of natural diversity, including potential industrial uses of wild plants.
- U.S. House of Representatives. Subcommittee on Environment and Natural Resources, Committee on Merchant Marine and Fisheries. Drug Discovery and Development from Natural Sources: The National Cancer Institute Experience. Report prepared by Michael Grever. November 9, 1993.

Reports on plant compounds being used in AIDS research.

U.S. Travel Data Center, U.S. Travel and Tourism Administration. Telephone conversation, October 1994.

Provided 1993 tourism revenue figures.

Wilson, Edward O. The Diversity of Life. New York: W.W. Norton & Company, 1992.

Documents benefits of natural diversity, including medicinal and agricultural values of plant species.

Wisconsin Department of Natural Resources. Letter to Christopher J. Botnick 14, January 1994.

Provides information on bald eagle tourism.

Species as Indicators of Ecosystem Health

Alliance for the Chesapeake Bay. The Chesapeake Bay.

Gives general information on the ecological significance of the Bay.

Associated Press/Albany TIMES UNION, 29 May 1994.

Covers IPA report released 5/2/94 stressing the connection between clean water and economic health. Documents status of national waters, cites figures for lost revenues due to beach closings in NY and NJ, and gives recreational fishing statistics.

Chesapeake Bay Program. Proceedings of the Chesapeake Bay Contaminated Fin fish and Shellfish Tissue Issue Forum. 17 March 1993.

Discusses findings on contaminants affecting Chesapeake Bay finfish and shellfish.

Dart, Bob. Cox News Service/Memphis Commercial Appeal, 30 May 1994.
Reports on beaches closed due to water pollution.

Greenpeace. Greenpeace Fisheries Index.

Cites revenue figures for U.S. fishing industry and impacts of overfishing in New England.

Naeem, Shahid, Lindsey J. Thompson, Sharon P. Lawler, John H. Lawton and Richard N. Woodfin, "Declining biodiversity can alter the performance of ecosystems," Nature. 21 April 1994, 734.

Illustrates how the loss of species can curtail ecosystem functions beneficial

National Wildlife Federation. Fertility on the Brink: the Legacy of the Chemical Age, 1994.

Documents how the buildup of hormone-imitating chemicals in animals and humans is disrupting reproduction, immunity, behavior, and metabolism.

New York Times/San Diego Union-Tribune, 18 September 1994.

Report on boy dying from swimming in contaminated Rio Bravo River in Laredo, TX.

Orlando Sentinel, 5 September 94. Presents figures on deforestation in Florida.

Tilman, D., et al. "Habitat destruction and the Extinction Debt," Nature. 1 September 1994, 65-66.

Suggests that the extinction of an ecosystem's "best competitors" leads to its further decline.

Subsidized Species Endangerment

Beasley Jr., Conger. "Killing Coyotes." Buzzworm: The Environmental Journal 5, no. 1 (January/February 1993): 36-41.

Reviews history and current debate of the Animal Damage control program.

Losos, Elizabeth, Justin Hayes, Ali Phillips, Carolyn Alkire and David Wilcove. The Living Landscape, Vol. 3: Taxpayer's Double Burden. The Wilderness Society and the Environmental Defense Fund, 1993.

Investigates the relationship between subsidized resource extraction on public lands and endangered species habitat degradation.

Horning, John. Grazing to Extinction: Endangered, Threatened and Candidate Species Imperiled by Livestock Grazing on Western Public Lands. The National Wildlife Federation, June 1994.

Investigates the relationship between subsidized grazing on public lands and endangered species habitat degradation.

- Schueler, Donald G. "Contract Killers," Sierra, November/December 1993, 70-76,97.

  Provides background on the Animal Damage Control program, reviews its performance and discusses the controversy over its continued existence.
- U.S. Department of Agriculture, Animal Damage Control. Telephone conversation and fax transmission, October 1994.

Provided budget and animal control statistics.

U.S. House of Representatives. Majority staff of the Oversight and Investigations Subcommittee of the Committee on Natural Resources. Taking From the Taxpayer: Public Subsidies for Natural Resource Development. 103rd Cong., 2nd sess., August 1994. Committee Print No. 8.

Investigates federal subsidies for resource extraction.

[Note: Appendices to this statement have been retained in committee files.]

# STATEMENT OF R. DENNY SCOTT, UNITED BROTHERHOOD OF CARPENTERS AND JOINERS OF AMERICA

On behalf of the United Brotherhood of Carpenters and Joiners of America (UBCJA), I am submitting this statement of our union's position on reauthorization of the Endangered Species Act (ESA). The 600,000 members of the UBCJA are employed in construction, installation of heavy equipment (millwrights), shipbuilding, furniture, cabinet/millwork, logging, lumber, plywood and other wood manufacturing industries.

Approximately 50,000 members of my union are employed in sawmills and wood products manufacturing. These are the working men and women who have personally felt the heavy blow of an unbalanced Endangered Species Act. In the Northwest, our members are reeling from the impact of efforts to protect the Northern Spotted Owl. President Clinton's Option Nine virtually prohibits timber harvesting on 21 million of acres or 88 percent of federal land in the Owl habitat regions of Oregon, Washington and Northern California. ESA has further restricted harvesting activities on state and private land.

The result has been mill closings and job lay-offs. According to a recent report, over 200 timber mills have closed in Washington, Oregon, California, Idaho and Montana since 1990 and mills have been closing at a steady rate of two per month since the beginning of 1994. Almost 18,000 men and women working in those mills have lost their jobs. <sup>1</sup>

Timber-dependent Pacific Northwest communities have watched their tax bases erode as unemployment rises and social services are overburdened. In addition, the federal government has lost much-needed revenues as halting timber harvests have prevented the sale of federal timber rights to private companies.

The controversy over implementation of a recovery plan for the Northern Spotted Owl has increased public awareness that there are real costs accompanying any benefits of the Endangered Species Act. As more and more workers lose jobs, as timber mills continue to close, as communities see essential government services reduced, there are growing calls for a re-evaluation of ESA.

The United Brotherhood of Carpenters and Joiners of America strongly supports a review of the goals and effectiveness of ESA not only in terms of efforts to preserve endangered species, but also in terms of the social and economic impacts on affected communities. In our view, the Act has failed to adequately consider these issues and a review will show the need for adjustments to the Act.

Under current law, the only place under ESA where economic and social impacts are specifically addressed is in the designation of a critical habitat. Yet, even Secretary Babbitt has admitted that most impacts occur as a result of listing a species. Moreover, since less than 20 percent of listed species have designated critical habi-

<sup>&</sup>lt;sup>1</sup>Forest Products Industry Report on Mill Closures, Operations, and other Related Information, July/August 1994 by Paul F. Ehinger and Robert Flynn.

tats, that leaves 80 percent of listings exempt from any systematic examination of social and economic consequences.

Under the Act, an application can be filed with the federally established Endangered Species Committee for an exemption from land use restrictions in a designated critical habitat. Yet, despite the fact that this exemption process is the principal means in which economic factors are intended to be considered under the Act, it is rarely used. One reason is the unwieldy nature of the application process which has complex procedures and requires detailed documentation. The problem with the exemption process was demonstrated recently when the Bureau of Land Management (BLM) sought an exemption for some of its Oregon timber sales. After the expenditure of considerable resources by the federal government and parties involved, BLM was forced to withdraw its application in the face of heated controversy.

The UBCJA supports legislation introduced by Senator Richard Shelby (D-Ala.) called the "Endangered Species Procedural Reform Amendments" (S. 1521). We believe this bill represents a reasonable attempt to balance the goals of ESA with the needs of workers and communities across the country. It does so by explicitly requiring the development of alternative recovery strategies which consider economic and social impacts and, at the same time, preserving the scientific integrity of the Act's listing process.

The UBCJA is by no means alone among labor unions supporting change in the ESA. In fact, our position is exactly consistent with that of the AFL-CIO. Standing policy within the AFL-CIO on this issue was stated in a resolution and states the following:

"... The AFL-CIO goes on record as supporting the Congressional reauthorization of the Endangered Species Act while also supporting amendments to inject more balance between the goals of wildlife protection and the human, social and economic consequences of the actions; and be it further resolved: That to carry out this objective we call for the Act to be modified to require the U.S. Fish and Wildlife Service to conduct a qualified and competent economic/cost impact/human impact analysis in the proposed listing process to permit more informed decision making concerning options to protect threatened species while minimizing economic dislocation and job losses."

In addition, the UBCJA, along with seven other trade unions, works with a coalition called the Endangered Species Coordinating Council. The ESCC seeks to provide workable procedures in the ESA which promote conservation of wildlife in a way that adequately considers economic and social impacts. The coalition also endorses S. 1521.

Mr. Chairman, a comprehensive review of the benefits and costs of the Endangered Species Act is long overdue. Efforts to protect endangered species must continue. But the search for environmental protection must include a close look at who pays the costs. For too long, the American worker has been paying the cost—with his or her job.

<sup>&</sup>lt;sup>2</sup>Adopted by the AFL-CIO on November 14, 1991, Detroit, MI.



# Wild Forever a collaborative grizzly bear project

Greater Yellowstone Coalition Sierra Club The Wilderness Society

National Audubon Society

Sen. Bob Graham, Chair Senate Subcommittee on Clean Water, Fisheries and Wildlife U.S. Senate Washington, DC 20510

October 10, 1994

Dear Sen. Graham,

I represent Wild Forever, a collaborative grizzly bear project of the Sierra Club, The Wilderness Society, Greater Yellowstone Coalition, National Audubon Society, and Sierra Club Legal Defense Fund. I am writing in response to testimony that was presented at the Sept. 29 hearing of the Senate Subcommittee on Clean Water, Fisheries and Wildlife by Marc Brinkmeyer, owner of Riley Creek Lumber Company. Mr. Brinkmeyer testified that the Endangered Species Act causes economic hardship to his area, and complained about scientific data used under the act. I will respond to several points he made, and I particularly want to highlight the scientific consensus about the harmful impacts of roads on grizzly bears. I ask that these comments be included in the hearing record.

The most egregious inaccuracy in Mr. Brinkmeyer's testimony is his contention that "Closing dozens of roads to achieve 70% grizzly security around Priest Lake will diminish, not enhance grizzly bear security. People, not roads, kill grizzly bears." He is apparently unaware of the strong scientific agreement about the problems that roads and the people using them cause to bears. Roads are widely acknowledged to negatively impact grizzly bears in four ways: first, most grizzlies will avoid areas near roads, so there is less habitat available to them. Second, bears that do use roads lose their fear of humans, so human-bear conflict is much more likely and those bears have a much higher mortality rate. Third, roads fragment habitat, reducing the large, wild spaces that bears and numerous other species need to survive. Fourth, by allowing humans greater access into bear habitat, roads increase legal and illegal bear kills. People inevitably use even closed roads, and the effects on grizzlies are severe.

Virtually all scientific data on this issue confirms these effects. That has led many researchers to conclude that substantial road closures are needed to bring grizzly bears toward recovery. The 1993 Grizzly Bear Recovery Plan stated, "Roads probably pose the most imminent threat to grizzly habitat today....The management of roads is the most powerful tool available to balance the needs of bears and all other wildlife with the activities of humans." I have enclosed two factsheets which summarize the overwhelming scientific evidence on the detrimental effects of roads.

Mr. Brinkmeyer uses proposed road closures on the Priest Lake District of the Idaho Panhandle National Forest as an example of the heavy harmonic the Endangered





Species Act. In fact, they demonstrate a success of the Act, where seriously degraded habitat that is nonetheless critical for bears is being targeted for restoration. I have enclosed our comments on that environmental assessment, in which we emphasized the project's many benefits.

Rather than being the "single-species management" that Mr. Brinkmeyer decries, these closures will have a beneficial impact upon many species. Measures undertaken to protect the grizzly will, at the same time, reduce mortality of endangered caribou and protect habitat for white-tailed deer, moose, lynx, wolverines, and many other species. Road closures will improve stream habitat for bull trout, another species in trouble. There will be long-term benefits to water quality, resulting in clearer streams. The Forest Service also found that the proposed action maintains access to important recreational areas, such as huckleberry picking by Indian Creek, camping and hunting along Kalispell and part of Petit Lake roads.

The claim that, "The Endangered Species Act has no provisions that prevent bad and/or outdated science from shaping agency policy," is simply wrong. Mr. Brinkmeyer's proposed change to the ESA, that it mandate the best available science in listing decisions, is already embodied in §4(b)(1)(A) of the Act. Similarly, recovery plans must include "site-specific management actions...necessary to achieve the plan's goal for the conservation and survival of the species." Up-to-date science is the very foundation upon which the Act rests. Furthermore, the economic considerations that Mr. Brinkmeyer emphasizes are included at every step of the process once listing has occurred.

Mr. Brinkmeyer is partially correct on one point: the 70% secure habitat standard in place on the Idaho Panhandle National Forest is not based on the most current science. In fact, the standard should be stronger. The best scientific data indicates that secure habitat must be further from a road and that both open and closed roads diminish habitat security. This new information was accepted by the U.S. Fish and Wildlife Service and used as the basis for the Biological Opinion on the proposed Lost Silver Timber Sale on the Flathead National Forest in northwestern Montana.

There is an inherent contradiction in Mr. Brinkmeyer's position on peer review of listing decisions. He accuses the ESA of "endless consultation without conclusion," yet he also calls for additional scientific review of listing decisions. The law currently allows the Secretary of Interior to extend the listing decision by six months when there is substantial scientific disagreement over the sufficiency or accuracy of the available data [P.L. 94-325 as amended, §4(b)(6)(B)(i)]. To avoid unnecessary expense and delays, formal peer review should only take place when there is a substantial scientific basis for questioning the biological status of the species under consideration for listing. We do support peer review for recovery plans with the concern that review does not further delay implementation.

Finally, Mr. Brinkmeyer calls for balance, noting that while habitat restrictions are being imposed in the United States, hunting of the adjoining Canadian population of grizzly bears continues. I would echo this call for balance: today grizzly bears live on less than two percent of their original range in the lower-48 states, with less than one percent of their original numbers. The Selkirk ecosystem, where Mr. Brinkmeyer lives, is estimated to contain 22-40 bears on both sides of the border, a fraction of what is needed to sustain a population over the long term. In the past two years, there have been at least six bears killed by people in the Selkirks. The fact that hunting is permitted in the Canadian portion of the ecosystem demonstrates tragic disregard for the biological situation, not a justification for diminished habitat protection in the United States. Indeed, a new balance is precisely what we need, where habitat protection is given the weight it deserves.

Twenty years of the ESA is not a long time to allow for the recovery of the long list of species that have been hard hit by development for a century or more, especially for slow-reproducing species like the grizzly bear. Yet Mr. Brinkmeyer criticizes the ESA for having recovered only six species in 20 years. In fact, 238 listed species, comprising approximately 41 percent of the species listed in the U.S., are considered to be stable or improving.

The best opportunity for increased state and local involvement is for those entities to establish a program to protect candidate species, to head off the need for listing. The grizzly bear is an "umbrella species," one whose protection will bring about the protection of hundreds of additional species occupying bear habitat, without additional cost and before they teeter on the brink of extinction themselves. Here in Montana, a broad cross-section of people in a state-wide working group have agreed that state wildlife agencies should be more proactive with species not yet listed.

The Endangered Species Act is a fundamentally sound law. Some changes are needed to better implement and strengthen the Act, but the principles which provide its foundation are rock solid. We encourage the committee members to support strengthened protection for endangered species. Thank you very much for the opportunity to comment.

Adam Ruben



#### PACIFIC NORTHWEST REGION

October 13, 1994

The Honorable Bob Graham U.S. Senate Washington D.C. 20510

#### Dear Senator Graham:

It was good to see you following the September 29th hearing before the Subcommittee on Clean Water, Fisheries, and Wildlife in the Senate Committee on Environment and Public Works. We look forward to assisting the Committee as it continues to consider the Endangered Species Act over the next year.

We seek to correct the record regarding fires, timber salvage harvest and salmon conservation. At the hearing, we heard much rhetoric about fires occurring in the western United States because the federal government was not expediting timber salvage and thinning sales. Environmentalists were accused of hamstringing the federal government's timber sales program. This rhetoric included statements that fires would degrade fisheries and wildlife habitat whereas logging activities could prevent such degradation.

The problem in western forests is not the Endangered Species Act, environmentalists or the lack of an active salvage timber sale program. The problem is that forest managers have failed to develop and implement rational, scientifically based natural resource management plans that will protect and restore federal lands to provide for healthy ecosystems.

To the credit of the Clinton Administration, the federal agencies have embarked on a process which may result in such plans. The Eastside Ecosystem Management Project (EEMP) was established by federal agencies to develop a comprehensive scientific assessment of the interior Columbia River Basin. Two regional environmental impact statements (EIS) are being developed in association with the scientific assessment. Long term strategies for coping with fire and forest health issues should be addressed in the scientific assessment and the EISs. The EEMP process may also provide directions for addressing fire issues in other portions of the West where fire is a natural part of the ecology.

1424 FOURTH AVENUE, SUITE 816, SEATTLE, WA 98101-2217 (206) 624-6430 • FAX (206) 624-7101

Printed on recycled paper

A recent Congressional Research Service letter (September 26th, 1994, attached) also dispels much of the rhetoric from the September 29th hearing. This letter points out that western fires may be inevitable despite our best efforts. It states that "...because of fuel types and loadings, topography, and temporary weather conditions (lasting a few hours to a few weeks), some fires simply cannot be stopped and some cannot even be influenced." The CRS letter also challenges the premise that forest health activities such as thinning and timber salvage sales will reduce fire control costs and damages. Specifically, the letter states that "Proponents of forest health activities often assert that reduced fuel loadings can reduce fire control costs and damages. While this assertion is logical, and is supported by some anecdotal evidence, there appears to be very little research documentation of widespread fire control savings from fuel treatment."

Even if forest management efforts were effective at reducing negative fire impacts, the financial impacts of trying to reduce fuel loads are probably not acceptable to Congress. The CRS letter states that 14 million acres may need fuel management in the west, and concludes, "[T] otal treatment costs would be about \$3.5 billion, roughly equal to the annual Forest Service budget."

Thank you for this opportunity to correct the record.

Sincerely.

Steven Whitney

Northwest Regional Director



Congressional Research Service • The Library of Congress • Washington, D.C. 20540

September 26, 1994

TO:

Hon. George Miller, Chairman

House Committee on Natural Resources

Attn: Charlene Dougherty

FROM:

Ross W. Gorte

Specialist in Natural Resources Policy

Environment and Natural Resources Policy Division

SUBJECT: Forest Fires and Forest Health Activities

The current wildfire season that is coming to a close (at least outside of southern California) has seen numerous large wildfires, with the deaths of several firefighters and the destruction of many structures. Many observers sugest that the extent and severity of the fires is largely due to the poor health of, and the unnaturally high fuel loadings in, the national forests of the West, and assert that forest health activities that reduce fuel loadings will reduce fire control costs and fire damages. This memorandum discusses fuel management, addresses questions of the benefit of fuel management for controlling wildfires and for reducing wildfire damages, and discusses the relative roles and responsibilities of Federal and State governments in wildfire protection. If you have any questions, please do not hesitate to call me at 7-7266.

#### **FUELS MANAGEMENT**

The Forest Service began moving into fuels management in the 1960s, to reduce the net cost of wildfires to society. Although numerous techniques can be used, one of the most common is prescribed burning — intentionally setting

<sup>&</sup>lt;sup>1</sup>This is not to suggest that all forest health activities will necessarily reduce fuel loadings. However, activities that achieve desired future forest conditions by removing flammable woody materials from the forest, such as by eliminating undergrowth or by harvesting dead and dying trees, would also reduce the fuel loadings.

<sup>&</sup>lt;sup>2</sup>For a discussion of wildfire economics, see: Julie K. Gorte and Ross W. Gorte. Application of Economic Techniques to Fire Management — A Status Review and Evaluation. Gen. Tech. Rept. INT-53. Ogden, UT: USDA Forest Service, 1979. (Hereafter referred to as Gorte and Gorte, Economics of Fire Management.)

fires within established control boundaries under prescribed conditions to burn the existing fuels when the fire can be contained. Occasionally, weather conditions change, and prescribed fires escape and cause unanticipated damages; for example, the Mack Lake fire in Michigan in May 1980 was a prescribed fire that escaped and killed one person and destroyed 44 homes and buildings. Despite the obvious risks, however, prescribed burning can be an efficient tool for fuel management.

Salvage timber operations can also be used to reduce fuel loadings. The Timber Salvage Sale Fund is a self-financing, permanently appropriated special account, with receipts from designated salvage sales deposited into the account for use in preparing and administering future salvage sales (and for road construction associated with those salvage sales). To the extent that salvage sales remove flammable woody materials from the forest, they can be considered fuel management activities. Furthermore, they can be legitimate tools for achieving desired forest health conditions. However, because they have to be sold, salvage sales must focus partially on removing merchantable wood, and reducing fuel loadings or achieving desired forest conditions could be compromised. In addition, salvage sales can be costly to the Federal Treasury. Salvage sales often cost more than the revenues they can generate, because of lower timber quality and higher operating costs for the buyers. Furthermore, the Treasury loses even when the sales are net cash generators, because 100 percent of receipts are deposited in the Fund for preparing and administering future salvage sales while 25 percent of receipts are returned to the States for use on roads and schools in the counties where the national forests are located -- i.e., 125 percent of salvage sale receipts are permanently appropriated, with the extra 25 percent being paid from profitable, non-salvage sales.

Because of the limitations on the use of the Salvage Sale Fund, some have proposed land stewardship contracting to achieve the desired fuel management and forest health results. As proposed in H.R. 5007, for example, land stewardship contracts would be agreements between the Federal Government and a private entity to establish desired future conditions, with the contract price paid from the sale of timber or other products, possibly supplemented with appropriations. The process is similar, in many ways, to the Timber Salvage Sale Fund, but without some of the constraints imposed by using timber sale contracts. As with salvage sales, under proper guidance, supervision, and monitoring, land stewardship contracting could be a legitimate tool for fuel management and for achieving desired future forest health conditions.

Regardless of how fuel management is funded, the economic efficiency of fuel management can and should be examined. Some research in the late 1970s by Dr. Donald Brent Wood of Northern Arizona University indicated that fuel management was economically justified only within 20 years of the timber's expected harvest; if the harvest was likely to be more than 20 years away, the fuel treatments did not offer enough protection to warrant the expense. Al-

<sup>&</sup>lt;sup>3</sup>See: Albert J. Simard, Donald A. Haines, Richard W. Blank, and John S. Frost. *The Mack Lake Fire*. Gen. Tech. Rept. NC-83. St. Paul, MN: USDA Forest Service, 1983.

though I am unaware of further research on the economics of fuel management, it seems likely that the Forest Service has funded additional research.

Finally, the possible extent of fuel management and forest health activities is unclear. To date, none of the discussions of forest health, salvage sales, and land stewardship contracting have identified the likely treatment costs or the acreage needing treatment. Treatment costs (including the net cash results of salvage sales) probably range from less than \$100 to more than \$1,000 per acre; "average" treatment costs are probably about \$250 per acre. If 10 percent of the National Forest System lands in the coterminus western States -- 14 million acres -- were treated, total treatment costs would be about \$3.5 billion, roughly equal to the annual Forest Service budget. Even if the cost were spread out over a decade, forest health and fuel management might require a 10 percent increase in agency appropriations, at a time when Congress and the President are trying to reduce the Federal budget deficit. Is such an increase warranted?

#### FIRE CONTROL

In general, when wildfires occur, the fire organization swings into full gear to try to stop them. For several years, beginning in the very late 1970s, the Forest Service and the National Park Service both had prescribed natural fire policies. In wilderness areas and Park System units with fire management plans, wildfires burning within prescribed situations were monitored, rather than aggressively suppressed. (These policies have been colloquially known as "let-burn" policies.) In recognition of the financial and environmental costs of total fire suppression, these policies permitted the use of wildfires to achieve the goals of prescribed fires. Following the Yellowstone fires in 1988, the use of prescribed natural fire has been halted. While one can question whether the prescriptions were sufficiently responsive to burning conditions (fuel moisture, precipitation, dry lightning, winds, etc.), the termination of prescribed natural fire policies seems an overreaction to the public outcry.

The public outcry over the Yellowstone fires that has been repeated this summer is, in part, a result of the belief that all wildfires can be controlled by the fire organization. The belief is widespread, internally as well as among the public, because of our general success in controlling structural fires in urban and suburban areas and because all wildfires eventually go out. However, because of fuel types and loadings, topography, and temporary weather conditions (lasting a few hours to a few weeks), some fires simply cannot be stopped and some cannot even be influenced. Nonetheless, substantial funds are spent on efforts to suppress uncontrollable wildfires. Such efforts contribute to the belief in our ability to stop all wildfires, and lead to public to believe that any damages from wildfires only occur because of the Government has been inefficient and ineffective.

The desire to control all wildfires has also led to a belief that fast, aggressive control efforts are efficient, because fires that are stopped while small will not become the large, damaging, fearsome fires that are so expensive to control. However, only a fraction of fire ignitions ever become the large, damaging, and

fearsome fires, even without fire suppression. The belief in efficiency of fast, aggressive fire control was embodied in the 10-acre and 10:00 a.m. policies of the 1930s. These policies were terminated in the late 1970s, because research documented that the policies led to organization size and efforts that far outweighed the benefits of fire control.

The proper technique to evaluate the economics of fire control, and of fuel management, is known as "least-cost-plus-loss." This approach, in essence, says that fire control is limited by the damage prevented. Little or no fire control is economically justified for wildfires that are doing little or no damage (the idea underlying the prescribed natural fire policies) or for wildfires that cannot be controlled (because no damage can be prevented). Similarly, fuel management is economically justified only when the treatment costs are less than the benefits, either in reduced control expenditures or in reduced damages (see below). Proponents of forest health activities often assert that reduced fuel loadings can reduce fire control costs and damages. While this assertion is logical, and is supported by some anecdotal evidence, there appears to be very little research documentation of widespread fire control savings from fuel treatment. However, such documentation is essential to demonstrate the merit of forest health activities for fire control savings.

#### WILDFIRE EFFECTS

Wildfires can damage lands and resources. Timber is burned, although some may be salvagable. Existing forage, for livestock and wildlife, is destroyed. The reduced vegetation can increase erosion; in severe situations, such as in southern California, the result can be mudslides when the wet season returns. And burned areas are not pretty.

The damages of wildfires on lands and resources are almost always overstated, for two reasons. First, fires are patchy, leaving unburned areas within the fire perimeter. Thus, reports of acres burned, typically calculated from the perimeter, overstate the actual acres burned by 10 to 50 percent, depending on the local vegetative and weather conditions.

Damages are also usually overstated, because fires do not destroy every living thing within the burned areas. Mature conifers often survive even when their entire crowns are scorched; a few species, notably lodgepole pine and jack pine, are serotinous — their cones will only open and spread their seeds when they have been exposed to the heat of a wildfire. Grasses and other plants are often benefitted by wildfire, because fire quickly decomposes organic matter into its mineral components (a process that, in the arid West, may require years or decades without fire), and the flush of nutrients accelerates plant growth for a

<sup>&</sup>lt;sup>4</sup>The 10-acre policy was that all fires should be controlled before they reached 10 acres in size; the 10:00 a.m. policy was that, for fires exceeding 10 acres, efforts should focus on control before the next burning period began (at 10:00 a.m.).

<sup>&</sup>lt;sup>5</sup>See: Gorte and Gorte, Economics of Fire Management.

few growing seasons. Few, if any, animals are killed by even the most severe wildfires; rather, many animals seek out burned sites for the newly available minerals and for the flush of plant growth. And erosion is typically far worse along the bulldozer trails dug to try to control the fire than from the borned areas. The recognition of these ecological benefits from fire was a major factor in the end of the 10-acre and 10:00 a.m. policies and their replacement with fuel management and prescribed burning (natural and otherwise).

Nonetheless, the net damages from wildfires are generally greater when fires burn more intensely. Thus, reducing fuel loadings may reduce the net damages caused by wildfires. Proponents argue that forest health activities that reduce fuel loadings also reduce wildfire damages. Again, this assertion is bustical, and is supported by some anecdotal evidence, but there appears to be very little research documenting widespread reduction in wildfire damages from fuel treatment. Such evidence is critical, however, to document the benefits of forest health activities for reducing wildfire damages.

Finally, it should be noted that emergency rehabilitation occurs on many of the large, severe wildfires. While emergency activities can prove beneficial, especially for erosion control, they may inhibit the restoration of natural ecological processes. In particular, grasses are often seeded in severely burned areas. However, the quick-growing grasses typically used may not be native to the area, and some grasses suppress tree seedling establishment and growth. Thus, emergency rehabilitation may cause as many environmental problems as it solves.

#### FIRE ROLES AND RESPONSIBILITIES

The Federal Government clearly has a responsibility for fire protection on Federal lands. The responsibility for protecting homes and structures on private lands in and around the Federal lands, however, is less clear. In general, the States are responsible for fire protection on non-federal lands, although cooperative agreements may shift those responsibilities when a realignment is efficient. It may be appropriate to maintain this separation, because of the differences between structural fires and wildfires. Structural firefighters use different techniques and face different hazards from wildfire fighters, but basic Forest Service firefighting courses focus on fighting wildfires.

Furthermore, the Forest Service has a cooperative fire protection program within its State and Private Forestry branch. This includes: (1) financial and technical assistance to State and other governmental organizations; (2) equipment loans of excess Federal personal property; and (3) cooperative fire prevention to provide a nationwide fire prevention program through public service advertising, education, partnerships, and other efforts. FY1994 appropriations for cooperative fire protection were \$17.1 million, but the budget request for FY1995 was only \$3.7 million, because the Clinton Administration proposed eliminating the financial assistance program (as was proposed several times during the Reagan and Bush Administrations).

Another question is about the relative priorities in wildfire suppression. Assuming that the fires can be controlled, should Federal firefighting decisions include values at risk on adjoining or surrounded non-federal lands? If so, this is de facto Federal fire protection for some private lands and structures. If not, the Federal Government may be liable for damages to private lands and structures from wildfires originating on the Federal lands — de facto free Federal fire insurance. In either case, it raises the question of whether Federal responsibility warrants Federal regulation — if the Federal government is responsible for fire protection and/or insurance, regulating building materials, site clearing and planting, road construction and access, etc. may be appropriate to minimize Federal costs.

1736 Valley View, Belmont, CA 94002, October 7, 1994.

Senate Environment and Public Works Committee, United States Senate, Washington, DC 20510.

DEAR COMMITTEE MEMBERS: Please include my following comments in the records of the hearings to be held on the reauthorization of the Endangered Species Act. Of all the pressing problems which plague this country today, I believe that the preservation of our biological heritage is the most vital to address. We need a stronger Endangered Species Act, not a weaker one.

By disrupting, degrading, and destroying ecosystems, for short-term economic reasons, we are destroying and degrading the basis for our own quality of life as well as our economy's base. History is replete with examples of older civilizations which made this mistake and lost the basis for their cultures and economies. The accelerated rate at which we are following these horrific examples is amazing. I have watched it happen in my lifetime. It is as though we have not learned from history and are turning our backs on current scientific research as well. Such short-sightedness seems to me to be suicidal if not immoral.

Congress should provide more legal protection for species of plant and animal life before, not after, they reach endangered status. Part of that protection must include adequate funding for legislation to put recovery plans into effect and to monitor and enforce the legislation. The emphasis should be on preserving ecosystems and habitats, and the government should move on this quickly and not talk it to death and then wring its collective hands over the difficulty, which has been pretty much the modus operandi for this Congress for all important problems.

Sincerely,

Joline Bettendorf.

# STATEMENT OF MULTI-TRADE ASSOCIATION ENDANGERED SPECIES ACT TASK FORCE

#### INTRODUCTION

This testimony is being submitted for the record on behalf of a "Multitrade Association ESA Task Force" (MATF). MATF represents thousands of oil and gas companies, including majors and independents who operate on Federal lands. Members of this task force include Rocky Mountain Oil and Gas Association (RMOGA), Western States Petroleum Association (WSPM), California Independent Petroleum Association (CIPM), New Mexico Oil and Gas Association (NMOGA), American Petroleum Institute (API), Independent Petroleum Association of America (IPAA), Independent Oil Producers' Agency (IOPA), Independent Petroleum Association of Mountain States (IPAMS), International Association of Drilling Contractors (IADC), and the American Association of Professional Landmen (APL). Because of our significant investment in Federal lands, we have a vital interest in how ESA is being implemented.

Impact of Increased Regulatory Burdens on the Oil and Gas Industry, State and Local Economies

There has been a significant decline in the domestic oil and gas industry over the last decade. while domestic oil production has sunk to its lowest level since 1958, below 6.9 million barrels a day, oil imports are approaching the 60 percent mark, an all-time high. Royalties from oil production on Federal lands have dropped by 47 percent from over \$3 billion for years 1980 through 1985 to \$1.6 billion for years 1986 through 1992. Over the last decade, over 50 percent of oil and gas industry related jobs [over ½ million] have been lost in our industry. moreover, State and local economies in all 28 producing States have been severely impacted.

While low oil prices have contributed to industry declines, increased regulatory constraints as well as costly delays have been a significant factor. Oil and gas companies are shifting capital investment overseas where operating costs and business conditions are more favorable, and where exploration and production is encouraged.

Many operators avoid Federal lands in the U.S. because of the high operating cost associated with doing business.

#### Limited Access to Oil and Gas Resources on Federal Lands

The Department of Energy estimates that public lands may hold 85 percent of our Nation's undiscovered oil and 40 percent of its natural gas resources. The American Petroleum Institute reports that about 70 percent of these reserves can be found on onshore Federal lands in Western States such as California, Colorado, New Mexico, North Dakota, Nevada, Montana, Utah and Wyoming.

Given the wealth of our domestic energy resources on Federal lands and the importance of oil and gas to the U.S. economy, and our energy future, reasonable access to those resources is critical. However, we estimate that over half [300 million acres] of onshore Federal lands are already off limits or severely restricted to oil and gas activities, such as wilderness, national parks and wildlife refuges. ESA requirements further limit access to otherwise accessible multiple use lands and place greater constraints on an industry already overburdened with regulations. This will likely further reduce industry employment, royalties and other revenues generated by the oil and gas industry.

Concerns and Recommendations—Implementation of the Endangered Species Act on Federal Lands

This testimony shall address five major areas of concern to the oil and gas industry. These include the listing process, critical habitat designation, Section 7 consultation, and recovery planning. Also discussed is the recent Administration policy directive as well as legislative reform proposals.

#### Joint Policy Directive

Math supports the objective to conserve and protect threatened and endangered species from extinction. However, the escalating costs to the Government, industry, and the public have not resulted in desired ESA objectives in that only a small percentage of species have actually been recovered and delisted.

The recently released joint policy directive by Secretary of the Interior, Bruce Babbitt, and Undersecretary of Commerce, D. James Baker, is progressive and responds to the above mentioned problems. These proposed changes should introduce some flexibility, ensure scientific review of listing decisions, improve coordination between the Federal and State governments, and reduce socio-economic impacts of recovery planning.

However, there are other industry concerns or problems not addressed in the joint policy directive discussed in this testimony. Further, the ESA should be statutorily amended to incorporate recommendations described in this testimony to minimize future legal or administrative challenges.

ruture legal or auministrative chanenges

## The Listing Process

The ESA requires that listing decisions be based solely on the best available scientific and commercial data. However, criteria and standards have not been established to determine what constitutes "best available scientific and commercial data," nor is such data validated through field testing or subject to independent scientific review.

Parties negatively affected by ESA decisions do not currently have standing to challenge those decisions in court. A citizen suit, to stop a project based on possible jeopardy to a species, can be brought. If a listing petition is rejected, the petitioner may legally challenge that decision. Negatively affected parties have no standing to challenge a decision to affirm a listing petition. Such inequities must be eliminated.

#### Recommendations

- Develop criteria and standards identifying "the best scientific and commercial data."
- Data used to support listing decisions must be field tested and peer reviewed by outside scientists for validity. Data gaps should also be identified.
- ESA must provide that parties negatively affected by ESA decisions may challenge those decisions in court.

## Critical Habitat Designation

Upon listing, the ESA requires designation of a critical habitat for threatened and endangered species to the maximum extent prudent and determinable. If there is insufficient biological data to designate a critical habitat, the Secretary may postpone this designation for 12 months. Due to apparent budget constraints, the U.S. Fish and Wildlife Service (USFWS) has not complied with this requirement. To date, critical habitat designations have been made for less than 20 percent of listed species. Ironically, this is the only part of ESA that now requires a socio-economic impact assessment.

Pending designation of critical habitat, distribution areas (geographic ranges) are typically used as potential habitats. These areas may cover thousands of acres sometimes covering several counties or even cross state boundaries. Land use activities are then prohibited or severely restricted in these vast areas until a survey and biological assessment are completed (in many cases taking several years). Mitigation

requirements are then prescribed.

For example, the San Joaquin Valley kit fox was listed in 1966. Almost 30 years later, critical habitat has yet to be designated. Nevertheless, activities are restricted throughout central California pending completion of site-specific biological assessments. Critical habitat data is lacking and required surveys are behind schedule. Thus, oil and gas operators are expected to undertake these projects, via an agency approved consultant, as a component of permit acquisition. In many cases, this is the only way to ensure required permits will be obtained within a reasonable time period. It also demonstrates how the cost of ESA legislative mandates are improperly shifted from government to industry.

Added to the cost of completing surveys, biological assessments, and mitigation plans, are compliance costs. Compensation in the form of dedications or acreage exchanges are generally required in disproportionate ratios ranging from 3-1 to 19-1. The burden of administering the ESA program is again unfairly shifted to private

parties.

The following are some industry examples of onerous delays, costly studies, and disproportionate mitigation:

• A small Texas operator's proposed 3-well exploratory drilling program in Southeastern Nevada was delayed due to BLM's concern that this activity may jeopardize the desert tortoise or its habitat. BLM required the operator to fund a \$6,000 habitat study. The study found the area was unsuitable habitat for the desert tortoise. Despite this finding, the BLM required a section 7 consultation, whereupon the company was required to hire a full-time biologist to monitor operations and erect fences around the well sites costing the company an additional \$24,000. The first well was also delayed 18 months.

The unwarranted mitigation costs coupled with technical problems with the second well caused the company to abandon the project. In addition to the loss of 10 jobs, lost opportunity costs are estimated at \$100,000. This experience has caused other operators to avoid the area, resulting in lost revenues to the Fed-

eral Government and State and local economies.

• Another company withdrew its application for a surface water discharge permit on a refining project (the discharge would have been minimal) when it was discovered that Colorado squawfish may be present in the area. After completion of a biological assessment, it was determined that the only feasible alternative was to construct a lined pond and to install an underground injection well at a cost of \$1,000,000. This additional financial burden rendered the project uneconomical and the company withdrew its application.

• The Forest Service required a company to delay construction of a flow line in a 50-year old oil field, complete with roads, flowlines, and producing wells, pending completion of new T&E plant and wildlife surveys and public involvement. The surveys, which cost the company \$4,000, resulted in a 6-month delay during which existing production was interrupted. In order to avoid further delays, the company elected to spend an additional \$40,000 to tie in with an existing flowline owned and operated by another company. At 300 barrels of oil per day which could have been produced during the six-month delay, the com-

pany estimates it lost over \$600,000 in revenue.

• Due to the presence of the kit fox, a company spent over \$200,000 for habitat studies and mitigation measures just to acquire seismic data in central California. Indeed, the company was required to hire full-time biologists to accompany each seismic crew as it conducted its exploration activities to assure kit fox dens were avoided.

#### Recommendations

• Clearly define "critical habitat" of threatened and endangered species and include evidence that such habitat is "critical" to species survival.

· Identify critical habitat on a map at the time a species is listed, but no later

than 12 months after final listing.

- A "potential" critical habitat based on existing data must be designated at the time of proposed listing. Final listing should be delayed until this is resolved.
- The definition of harm or harassment should be narrowed to actual harm or destruction of the species (a minor modification of habitat must not be considered to constitute harm or harassment).

#### Recovery Plans

The ultimate goal of ESA is to hasten recovery of a species once identified as threatened or endangered. This goal is not being met under current ESA implementation. Less than half of listed species have approved recovery plans. Although there are many plans under development, it often takes years for them to be finalized and even longer before agencies begin implementation. Consequently, many species never get the protection or management theoretically available under ESA. Once a recovery plan is in place, oil and gas operators generally benefit due to a greater level of predictability which helps to expedite permitting of oil and gas activities.

Recovery plans focus on protecting species from extinction by the impacts of user activities. Equally important, recovery plans should include assessment of how recreation or commodity development will be impacted by listing a species. Historically, affected user groups are not invited to participate in the development of recov-

ery plans.

# Recommendations

• Require completion of draft recovery plans for public comment within 12 months of listing. Require completion of a final recovery plan within 18 months of listing or suspend the listing process for that species.

• Recovery plans must consider impacts of listing on all uses within critical habitats. A socio-economic impact assessment must be completed as a compo-

nent of the final recovery plan.

• Affected groups must be participants in the recovery plan development process.

#### Section 7 Consultation

Project proposals are subject to multiple reviews within land management agencies creating bottlenecks and delays in the issuance of permits. Section 7 of the ESA allows 90 days in which to complete the consultation process. However, due to internal agency delays, the process typically requires 6 to 12 months to complete.

#### Burden of Proof

Project proponents are required to prove listed species and their habitats are not present in the proposed activity area, and that such activity would not adversely affect the species or habitat. The costs of such an evaluation often renders a project uneconomical. Moreover, proving the proposed action will have no adverse effect on species over the long term is virtually impossible.

The USFWS uses proposed projects as a means for conducting and funding research rather than limiting decisions to existing data. This is another example of the Federal Government shifting the cost of legislated studies or mandates to indus-

try rather than using the agency's budget to gather new data.

#### Recommendations

• In the event a jeopardy opinion is rendered, the USFWS must demonstrate from existing information that a threatened or endangered species and its critical habitat is present and at serious risk.

 The consultation process should be streamlined to eliminate extraneous internal reviews and approvals. Agencies should establish a maximum of 45 days

for completion of the process.

#### LEGISLATIVE REFORM PROPOSALS

In recent years, a number of legislative reform proposals have been introduced and debated as part of ESA reauthorization. While many of these reforms would increase ESA effectiveness and bring greater flexibility and balance to ESA, S. 1521 is the best vehicle for addressing industry concerns. This bill also addresses private property right protection, which we support.

#### S. 1521

If enacted, S. 1521 would accomplish the following improvements to the ESA by requiring:

- Data, used to support ESA decisions, must be field tested and data gaps must be identified.
- Independent peer review of listing proposals and critical habitat nominations by outside scientists.
- Clear definition of critical habitat and establishment of standards to meet critical habitat definition.
- Direct consultation be available to non-federal parties with a secretary level response to affected private parties within 90 days of request.
- Give priority to recovery plans with "multiple" species objectives, best probability of recovery and minimal negative socio-economic impacts.
- Consider socio-economic impacts of a proposed recovery plan and give priority to those plans which have least socio-economic impacts.

• Incentives for private landowners and land users to conserve.

- Development of draft recovery plans within 12 months of listing and final recovery plans within 18 months of listing.
- Public hearings on draft recovery plans be held and affected parties invited to participate in the recovery planning process.
- Distinction between listed species and "candidate" species and applying the necessary level of protection.
  - The definition of "harm" or "harass" to be limited to actual harm to species.
- Standing for negatively affected parties to judicially challenge ESA decisions.
- Private property rights protection and compensation to private property owners when ESA decisions substantially devalue property or deprive them of economic viable use of their property.

#### CONCLUSION

The MATF appreciates this opportunity to provide testimony regarding ESA implementation on Federal lands. We urge the committee to carefully consider our recommendations for legislative reform. Legislative reform of the ESA is critical to ensure that balance is attained between biological and economic values.



BOSTON PUBLIC LIBRARY

3 9999 05983 344 0

ISBN 0-16-046232-0







